# CURRICULUM

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# 1984 Amendments to the Program of Studies for Elementary Schools

- i) Replace Contents page.
- ii) Replace Language Arts D.1.
- iii) Replace Divider for Mathematics/Science.

  Insert Computer Literacy section.
- iv) Replace Mathematics A.1 and Mathematics C.1 and C.2.
- v) Replace Science sections A. C. and D.
- vi) Replace Social Studies D.1 and D.2.
- vii) Replace all Health sections A. B. C. and D.
- viii) Replace all Physical Education sections A. B. C. and D.
- ix) Replace French D.1 (1979).

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# Program of Studies

# CONTENTS

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#### LANGUAGE ARTS

#### **FINE ARTS**

Art

Music

Drama

COMPUTER LITERACY

MATHEMATICS

SCIENCE

SOCIAL STUDIES

**HEALTH** 

PHYSICAL EDUCATION

FRENCH AS A SECOND LANGUAGE



# D. LEARNING RESOURCES

#### **Definitions**

- 1.1 In terms of provincial policy, learning resources are those print, nonprint and electronic courseware materials used by teachers or students to facilitate teaching and learning.
- 1.2 Prescribed Learning Resources are those learning resources approved by the Minister as being most appropriate for meeting the majority of goals and objectives for courses, or substantial components of courses, outlined in the provincial Programs of Studies.
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- 1.4 Supplementary Learning Resources are those additional learning resources identified by teachers, school boards or Alberta Education to support courses outlined in the provincial Programs of Studies by reinforcing or enriching the learning experience.

#### **Prescribed Learning Resources**

#### Reading

- Language Development Reading. Grades 1-6.
   Thomas Nelson & Sons (Canada), 1970-78.
  - Starting Points in Language Arts for Primary Grades. Grades 1-3. Ginn and Company, 1976-78.
- 3. Expressways. Grades 1-6. Gage Publishing Limited.

- V4. Starting Points in Reading. Grades 4-6. Revised. Ginn and Company, 1980-82.
- Gage Strategies for Language Arts. Grades 4-6.
   Gage Publishing Limited, 1972.
- 6. Sounds of Language. Grades 1-6. Holt, Rinehart and Winston of Canada, 1970-74.

#### Language

- Y. Starting Points in Language. Grades 4-6. Revised. Ginn and Company, 1980-82. (Designed to go with Starting Points in Reading.)
- 2. Nelson Language Stimulus Program. Grades 3-6. Thomas Nelson & Sons (Canada), 1973. (Continuing recommendation.)
- 3. Language and How to Use It. Grades 1-2. Gage Publishing Limited, 1973. (Continuing recommendation.)
- 4. World of Language. Grades 1-6. McGraw-Hill Ryerson Limited, 1973. (Continuing recommendation.)

#### **Spelling**

- √1. Spelling in Language Arts. Grades 2-6. Thomas Nelson & Sons (Canada), 1976.
- √2. *Spell/Write*. Grades 1-6. Canadian Edition. Edu-Media, 1978.
- 3. I Can Spell. Levels A-F. D.C. Heath Canada Ltd., 1977-79.
- A. The Canadian Spelling Program. Grades 2-6. Gage Publishing Limited, 1979.







# **COMPUTER LITERACY**

# A. PROGRAM RATIONALE AND PHILOSPHY

For thirty years there has been a steady improvement in ne performance of digital electronic components and a coresponding growth in the power of computer systems. The levelopment and widespread use of large-scale integrated ircuits that can be mass produced for a few cents has made t possible to build computers and other micro-electronic ystems in large numbers at low enough costs to open a nass market. The cost effectiveness of computing has ncreased more than a million times in the period following World War II.

During the next few years, micro-electronic intelligence s likely to be incorporated into a large number of household and industrial products. Many of these products will become inked together by a worldwide communications system into a vast network that will dominate our lives and fundamenally change the world in which we live. Humankind is witnessing the transformation of the industrial society based upon energy into the electronic society based upon information.

This transformation is creating the greatest occupational upheaval in history. Many people will emerge from this upheaval permanently unemployable. At the same time, there will be a critical shortage of advanced skills, most of them associated with microprocessors and their applications. There will be a need for the entire population to be computer literate, and unless such literacy is imparted from early childhood, a substantial part of the population may find that they lack the basic skills needed to get along in their daily lives.

As the specific skills, knowledge and attitudes required to be computer literate will vary with time and with the students' level of computer expertise, the definition of computer literacy should remain flexible and dynamic. The following functional definition presents the elements that form

the basis for the provincial computer literacy program:

To be computer literate one must be able to describe, demonstrate and/or discuss (critically) how computers are used; how computers do their work; how computers are programmed; how to use a computer, and how computers affect our society.

The computer literacy program is based upon the following philosophical assumptions:

- As computer literacy is an aspect of general literacy required to function in our information-based society, all students should have the opportunity to become computer literate.
- Since computers affect all subject areas, computer literacy should not be considered the specialization of one subject or group of educators. Interdisciplinary content and examples from various subject fields should be incorporated into the program.
- To become computer literate, each student must have "hands-on" computer experience.
- Computer literacy encompasses three dimensions: awareness, function and critical understanding. These dimensions should be introduced to students in a manner appropriate to their developmental and ability levels. Although all dimensions should be addressed at each level, the elementary school unit should place a strong emphasis on an overall awareness of computers in society, including their applications in everyday life. The junior high component should foster a functional or working knowledge of computers and their capabilities for problem-solving. At the senior high level, the program should stress critical understanding of the implications and effects of the use of computers in society and how computers can directly and indirectly affect the individual.



# **B. GOALS AND OBJECTIVES**

The elementary computer literacy unit is designed to ontribute to the achievement of the overall goals for comuter literacy in Alberta.

- To develop student understanding of basic computer operations and terminology.
- To develop an appreciation of the technological development of computer systems.
- To develop student skills, attitudes and interests which facilitate the use of computer systems.
- . To have students appreciate that effective problem-solving with computer systems requires the application of logical thought processes and the development of skills

- required for a holistic, systematic approach to problemsolving.
- 5. To have students appraise the applications, limitations and capabilities of computer systems.
- 6. To have students assess the current and potential impact of computer systems on society.
- 7. To develop student skills, attitudes and interests that will facilitate adaptation to changes in the workplace due to technological developments.
- 8. To promote a greater understanding and increase utilization of computer technology in other subject areas.



# C. CONTENT

The elementary computer literacy unit is an OPTIONAL 3-hour module that may be taught in one grade or be spread

#### ORE COMPONENTS

ppic 1: How Computers Do Their Work

pic	DIMENSION GRADE				
	OBJECTIVES	STATUS	4 5		6
he st	udent will: DESCRIBE THE BASIC OPERATIONS AND HISTORY OF				
. 1	COMPUTER SYSTEMS.  Identify the major parts of a computer.	А	X		
1.2	Describe in his/her words the meaning of the terms "hardware" and "software" and list examples of each.	A	X		
1.3	Describe in his/her words what is meant by "input" and "output" and give examples of each.	A	X		
1.4	Recognize that a computer gets instructions from a program written by a person.	A	X		
1.5	Identify the similarities and differences among computers, calculators and electronic games.	A		X	
1.6	Recognize that computers are best suited to tasks requiring speed, accuracy, repeated operations and the processing of large amounts of data.	A	X		
1.7	Recognize the rapid changes in computer capabilities since the 1940's.	A	X		
1.8	Explain the basic operation of a computer in terms of input, processing and output of data.	A	X		
1.9	Recognize the relationship of input to the result or output.	A	X		
1.10	Recognize that people control what computers do.	A	X		
		Hours	5	1	0

over all three grades at the Division II level, as indicated in the following charts of CORE COMPONENTS.

Topic 2: How to Use a Computer

ODIFICTIVES		DIMENSION	GRADE		ÞΕ
	OBJECTIVES	STATUS	4	5	6
The	student will:				
2.0	USE A COMPUTER SYSTEM.				
2.1	Use a prepared program in a computer.	F*	X	Х	X
2.2	Show respect and responsibility for equipment and other users' materials (e.g., follow safety and scheduling rules).	AF*	X	X	X
2.3	Use system commands to load and run programs.	F*	X	X	X
2.4	Feel confident about his/ her ability to use and control computers.	AF*	X	X	X
		Hours	2	3	1

Topic 3: How to Make Computers Work for You

OBJECTIVES		DIMENSION STATUS		GRADI	
				5	6
The s	FOLLOW AN ORDERLY SEQUENCE OF STEPS TO DEVELOP A COMPUTER PROGRAM TO SOLVE A PARTICULAR		4		
3.1	PROBLEM.  Recognize that a computer program is an ordered series of instructions that allows a computer to perform tasks.	A		X	
3.2	Order specific steps in a procedure to accomplish a task.	F		X	
3.3	Find and correct errors in a procedure to perform a task.	F		X	
3.4	Create and save a simple computer program.	F*		X	
3.5	Check computer output to ensure results are reasonable.	F*		X	
		Hours	0	6	0

NOTE: Dimension Codes — A = Awareness; F = Function; U = Critical Understanding. Hands-On Required — \*

Recommended grade if unit is taught across Division II grades — X

Topic 4: How Computers Are Used and What They
Can and Cannot Do

OBJECTIVES	DIMENSION	GF	RAI	E
OBJECTIVES	STATUS	4	5	6
The student will:				
4.0 DESCRIBE THE BASIC APPLICATIONS, LIMITATIONS, AND CAPABILITIES OF COMPUTERS.				
4.1 Identify the areas in society where computers are used (c.g., banking, manufacturing, transportation, medicine, recreation, the home, the library, publishing, creative arts, education).	A	X		
4.2 Identify the tasks performed by computers in these areas.	A	X		
4.3 Recognize that computers cannot "think" in the way we normally use the word "think".	U			X
4.4 Recognize that there are a number of things computers cannot do such as make value judgements and provide answers to every question.	U			X
4.5 Describe the similarities and differences between computers in fiction and real computers.	U			X
	Hours	3	0	3

**Topic 5:** How Computers Affect Society

	OBJECTIVES	DIMENSION	GRAI		E
	OBJECTIVES	STATUS	4	5	6
The	student will:				
5.0	APPRECIATE THE IMPACT COMPUTERS CAN HAVE ON OUR LIFESTYLE.				
5.1	Describe how a computer can affect him/her as hc/she assumes various roles (e.g., student, consumer, worker, citizen).	U			X
5.2	Recognize that alleged "computer mistakes" are usually mistakes made by people.	U			X
5.3	Recognize that computers are machines designed and operated by humans to assist in many tasks.	U			X
		Hours	0	0	6

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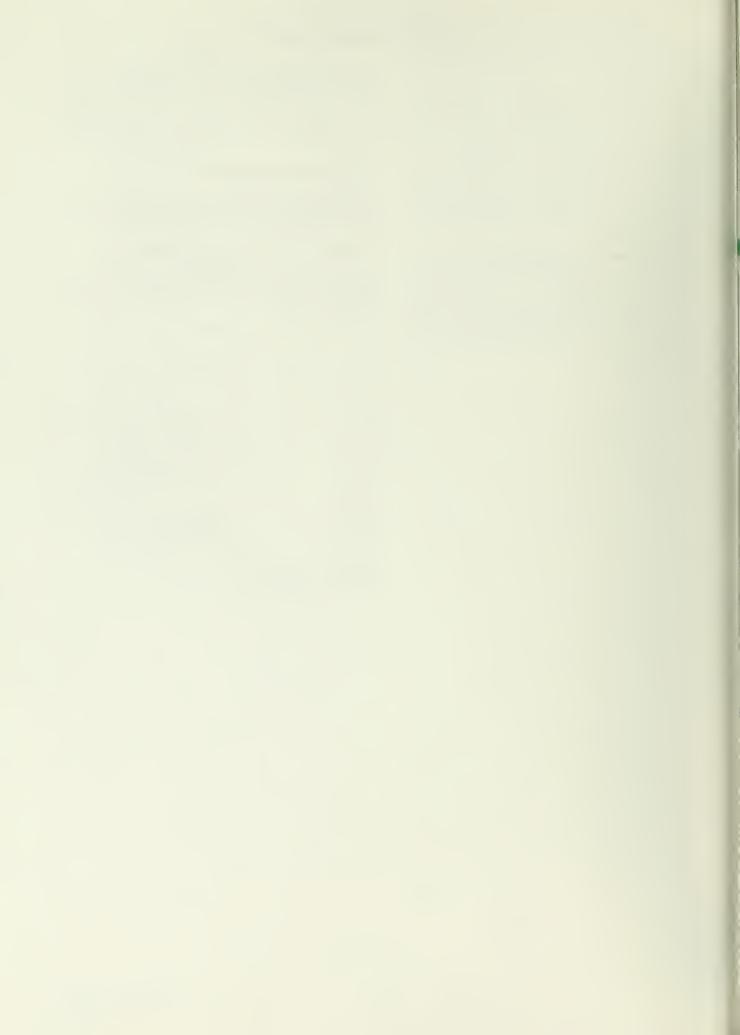
1.4 Supplementary Learning Resources are those additional learning resources identified by teachers, school boards or Alberta Education to support courses outlined in the provincial Programs of Studies by reinforcing or enriching the learning experience.

#### 2. Prescribed Learning Resources

No learning resources have been designated as prescribed resources for the elementary computer literacy unit.

#### 3. Recommended and Supplementary Resources

These resources are listed in the Elementary Literacy Curriculum Guide.



# **MATHEMATICS**

# The 1982 Elementary Mathematics Program of Studies is mandatory, beginning September, 1982.

Revisions to the 1977 program of studies have been minor in nature. Mathematical skills, concepts and attitudes within the program are designed to form a minimum core program for the majority of Alberta students. Revisions to the program reflect many of the recommendations for school mathematics made by the National Council of Teachers of Mathematics. In addition, information gathered from school systems and provincial testing have helped guide the revisions made to the 1977 program.

The five content strands of Numeration, Operations and Properties, Measurement, Geometry and Graphing have been retained. Greater attention is placed on problemsolving, geometry, SI metrication, decimals and mathematical applications. Minor shifting of subject matter has been made in an effort to balance content demands throughout the grades. Recognition has also been given within the program to the influence of technological advances such as the calculator and the computer.

# A. PROGRAM RATIONALE AND PHILOSOPHY

The role of mathematics in our world is evident in all spects of human endeavour. Whether used by the scientist r the grocer, the need to quantify information and to perform mathematical operations for the purposes of better nderstanding our world, and functioning therein, is readily byious. From time immemorial mathematics has played, nd will continue to play, an important role in the history f man's existence. For these reasons, mathematics is conidered to be one of the "basics" of education.

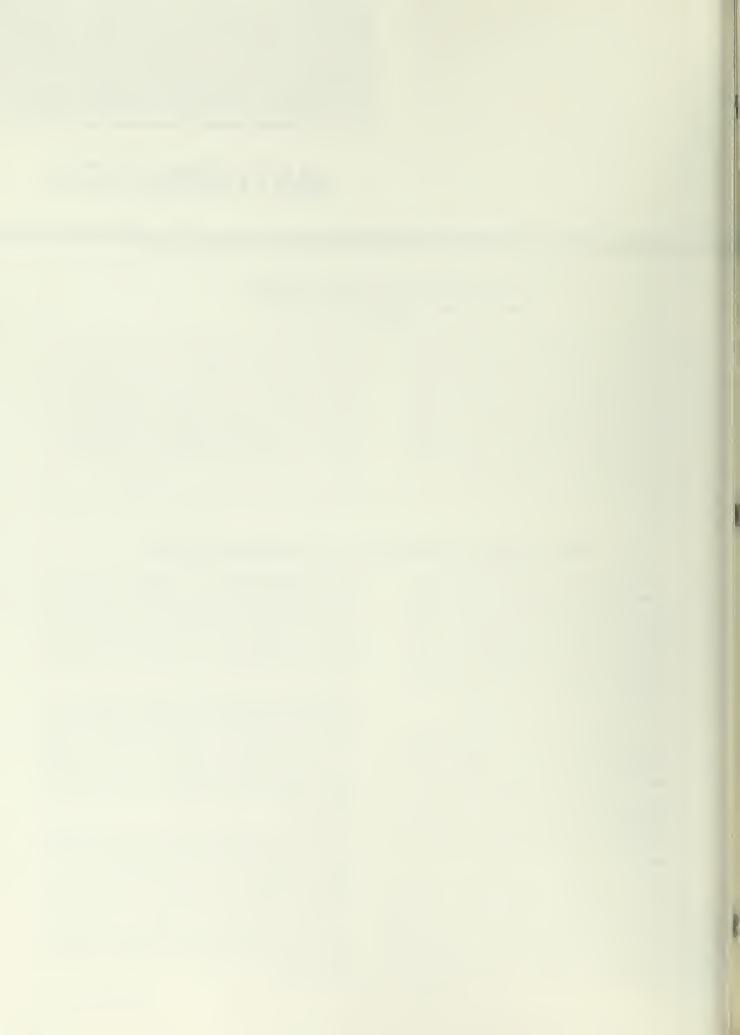
The process of schooling, and education in general, must provide for opportunities to develop and extend mathematical competencies. These competencies include understanding of number and measurement concepts, facility in computational and graphing skills, understanding of geometric relationships, and the use of effective problem-solving processes. The Alberta elementary school mathematics program is designed to meet these needs through the inclusion of basic mathematical concepts, skills, and attitudes.

There is general agreement that mathematical concepts and skills have not changed significantly over the years. What has changed substantially, however, is our understanding and knowledge of how children learn mathematics. It is now widely accepted that elementary school children learn best when actively involved in the learning process. In recognition of this premise the elementary mathematics

program encourages the use of manipulatives and student constructions as an important and necessary step in forming mathematical abstractions. This precept is reflected in the psychomotor component of the program and throughout the subject matter statements, all of which call upon the student to be an active participant in the learning of mathematical concepts.

Problem-solving, the ability to reason and apply mathematics in problem situations, is considered an integral part of the basic skills required for mathematical literacy. The ability to solve problems increases with importance in light of the rapidly changing demands of today's technological society. Mathematics plays an important role in developing within each student the problem-solving skills that will serve throughout life.

The influence and impact of micro-electronic technology on mathematics curriculum and instruction are only beginning to be felt. There is no doubt that computer and calculator technology will result in changes in the content of mathematics programs and the manner in which concepts are taught. The questions remaining are, what changes? How quickly? And what are the implications? In view of their potential, Alberta Education encourages teachers and schools to take full advantage of the benefits of calculators and computers.



## C. CONTENT

#### Minimum Core Component

The minimum core component of the program consists of mathematical concepts and skills that are designed to be achieved by the majority of students. The method and sequence of presentation may be modified to meet the needs of individual students, ability differences within classes, and classroom organization (e.g., gifted students, remedial students, combined grades).

The minimum core program should also allow for extension/enrichment and remedial activities in order to meet these needs.

#### 2. Extension/Enrichment Component

Extension/enrichment activities should be provided for those students able to go beyond the minimum core expectations. This should be in the form of horizontal development of concepts at the given grade level, applications of mathematics, or the study of mathematical topics not covered in the program.

#### 3. Remediation Component

Remediation requires continual assessment of student performance. As such, additional time and varied instruction may be necessary to fix or reinforce a concept or skill.

#### . Allocation of Time

The recommended minimum time per grade is 200 instructional minutes per week. Additional time could be added to the mathematics program if religious studies and/or second languages are not a part of the school program.

Time should also be allowed for activity-based lessons to take place. This may require that occasionally the mathematics period will have to be extended.

The suggested weighting or emphasis to be placed on each strand is provided below. This may vary from grade to grade, or from class to class, depending on the needs of the student and class.

60% Numeration, Operations and Properties

10% Measurement

10% Geometry

10% Graphing

10% Extension/enrichment or remediation

#### 5. Program Elements

The Elementary Mathematics Program of Studies is comprised of four main elements:

- i) Problem-Solving Skills
- ii) Psychomotor Skills
- iii) Attitudes
- iv) Mathematical Concepts

#### i) Problem-Solving Skills

Problem-solving skills are the processes involved in collecting, organizing and interpreting information gathered from the environment. The importance of these skills lies in their utility in obtaining and applying the most useful information toward answering questions and solving problems.

In the elementary mathematics program, development of problem-solving strategies is outlined for each grade level, maintained and extended to the next grade. Facility in problem-solving requires a wide repertoire of strategies and approaches.

The teaching for understanding of problem-solving skills must also consider the intellectual growth of the child. The processes included in the program recognize the various stages of development of the child through his elementary school years.

The following chart describes four basic steps associated with the problem-solving process. These steps include:

- Understanding the Problem
- Developing a Plan
- Carrying out a Plan
- Looking Back

Within each step are problem-solving strategies which assist in the thinking through, and the solving of problems. It is not intended that the total of these strategies be dealt with in the earlier grades. Teachers should consult the curriculum guide for grade by grade treatment of the problem-solving component.

## STEPS IN THE PROBLEM-SOLVING PROCESS

Understanding the Problem	Developing and Carrying Out a Plan	Looking Back
<ul> <li>Using manipulatives</li> <li>Interpreting pictures</li> <li>Looking for patterns</li> <li>Identifying key words</li> <li>Acting it out</li> <li>Drawing diagrams</li> <li>Restating the problem in your own words</li> <li>Asking relevant questions</li> <li>Identifying wanted, given and needed information</li> <li>Identifying extraneous information</li> <li>Considering alternative interpretations</li> </ul>	<ul> <li>Acting it out</li> <li>Using manipulatives</li> <li>Collecting and organizing information (charts, graphs)</li> <li>Applying patterns</li> <li>Choosing and applying the appropriate operation</li> <li>Writing and solving a number sentence</li> <li>Guessing and checking</li> <li>Identifying and applying relationships</li> <li>Making diagrams and models</li> <li>Using a simpler problem</li> <li>Using logic or reason</li> <li>Constructing flow charts</li> </ul>	<ul> <li>Stating an answer to the problem</li> <li>Restating the problem with the answer</li> <li>Determining the reasonableness of the answer</li> <li>Explaining the answer</li> <li>Reviewing the solution process</li> <li>Considering the possibility of other answers</li> <li>Looking for alternative ways to solve the problem</li> <li>Making and solving similar problems</li> <li>Generalizing solutions</li> </ul>

#### ii) Psychomotor Skills

Psychomotor skills involve coordination between the intellect and muscular movement. Development of these skills requires the handling and manipulating of a variety of materials.

Mathematical concepts are, by nature, abstract. For this reason it is necessary that children experience a variety of hands-on situations involving manipulations from which they can relate mathematical abstraction. For example, geometric relationships should first be taught through manipulation and construction of geometric shapes.

The following dimensions of psychomotor skill development should be provided for within the instructional process:

- Hand-eye coordination activities
- Activities that involve the handling and use of materials and equipment
- Construction of spatial figures and solids

#### iii) Attitudes

Attitudes often determine what we do in given situations. Whether we persevere with something difficult or give up trying, whether we consider something worth caring about or regard it as unimportant, relate to the attitudes we hold. The development of positive attitudes towards oneself and learning are primary goals of all school programs. In the elementary mathematics program particular attention should be given to the development of:

- A positive self-concept
- A positive attitude to learning
- A positive attitude towards mathematics

# SCIENCE

The Program of Studies for Elementary School Science was approved for use in schools on a mandatory basis, effective September 1982. The program statements herein are a revision of the 1980 program based on content changes needed to accommodate the recommended minimum time allocations approved in 1981.

# A. PROGRAM RATIONALE AND PHILOSOPHY

#### Rationale

Children live in a vast, interesting and expanding world of science and technology. New discoveries, new dimensions of human endeavour, and new understandings change the facts and events of yesterday. Rapid changes in all sectors of human activity have produced phenomenal advances in knowledge and technology. Such changes influence educational practices and, in particular, the approach to science education in the elementary school.

In the past, education has tended to focus on the teaching of facts with emphasis on rote learning. While this is a natural and obvious goal of schooling, it should not reflect the total educational experience. Particularly important is the development of those skills that lead to orderly inquiry processes. To develop understanding and proficiency in the skills of science, children must be encouraged to investigate phenomena and solve problems in a logical fashion. Observing carefully, collecting relevant data, making logical inferences, and communicating their ideas effectively are consistent with the learning skills which are important in each child's education.

Science is, at one and the same time, a body of knowledge and a process of inquiry. Science experiences should be based on inquiry and should involve students in developing and practising the process skills, in learning new concepts, in developing psychomotor abilities and acquiring positive attitudes towards science and self. The science program reflects the importance of all these components in its curriculum and instruction

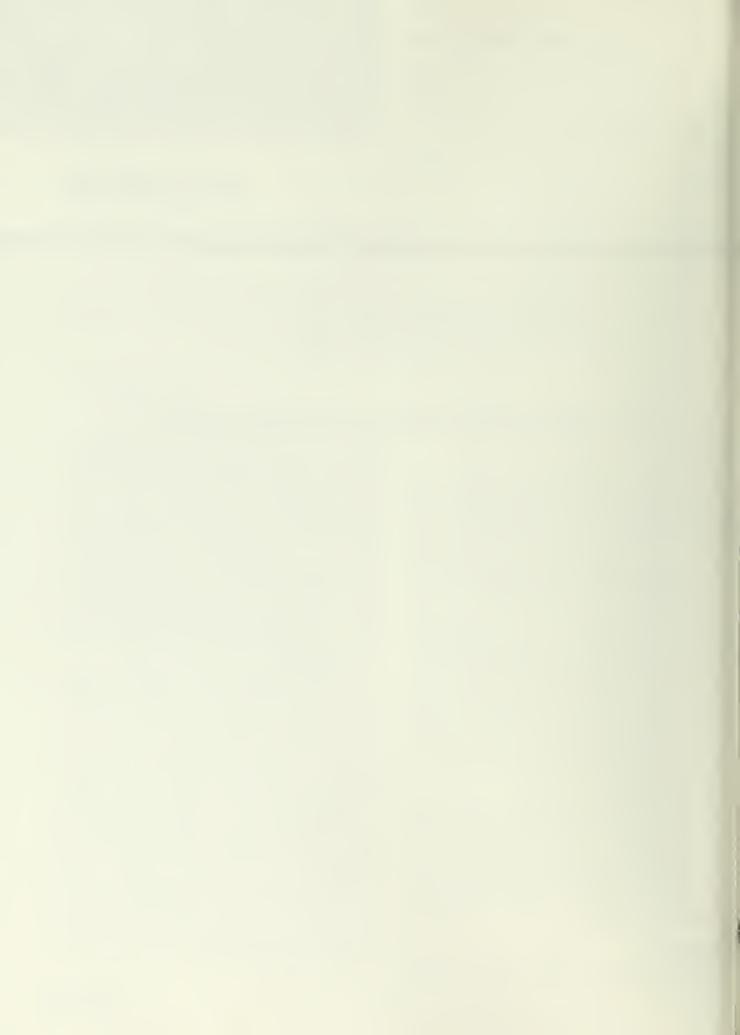
#### Philosophy

Elementary science should provide children with oppor-

tunities to extend their curiosity and to learn about the natural world through a series of planned learning experiences. By offering a diversity of interesting and challenging experiences, the science program will involve children directly in personal rather than vicarious learning. It is through direct learning activities that children develop proficiency with the process skills of science and improve their abilities to think critically. By placing emphasis on these skills, the science program will help the child to evaluate and assimilate information rather than just accumulate it. Thus, the program should emphasize ways of gaining and processing information rather than learning information itself. Content serves as the context in which important skills and attitudes may be developed.

At the Division One level, the elementary science program recognizes that the child is in transition throughout the initial stages of intellectual development. The program provides opportunity for children to interact with their environment, to discover relationships and to make simple generalizations. The intent of the program at this level is to encourage and stimulate children's natural curiosity through exploration and discovery while emphasizing the communication skills to express their ideas and to learn from others.

At the Division Two level, the program prepares the child for more formal learning by introducing concepts at a more advanced level. The program maintains its emphasis on the development of the process skills with students actively participating in "hands-on" learning experiences. A variety of topics from the life, physical and earth/space sciences are built into the core program to provide a broad framework of experiences. The program at this level also places an emphasis on the environment and on energy resources with a view to using them responsibly.



## C. CONTENT

#### 1. PROGRAM STRUCTURE

#### **Core-Elective Format**

The program of studies consists of core and elective components. The core program consists of skills, concepts and attitudes that are to be learned and developed by all elementary school students in Alberta. The suggested allocated time for teaching the core program should range between 70-80% of the total time allotted for science instruction

The elective component provides an opportunity for teachers to choose from a variety of topics in order to complete the program in the time given to elementary science. Teachers may select from chapters designated as elective in text programs, appropriate commercially available units of study, and locally developed units. The intent of the elective component is to provide teachers with greater flexibility in planning their programs to meet student needs and to utilize local resources.

#### Nature of the Elective

- 1. The elective portion of the program should comprise approximately 20-30% of the instructional time allotted for elementary science.
- 2. The elective portion of the program can be covered on a regular basis throughout the school term (e.g., once a week, twice a month) or be consolidated into larger blocks of time (e.g., 2 week units).
- 3. The content of the elective may be:
  - (a) an extension of the subject matter in any of the core topic areas.
  - (b) a content area not prescribed as a core topic area but covered by the text series being used.
  - (c) locally developed units as determined by the teacher or school system.
  - (d) determined by student and/or teacher interest.

#### 2. RECOMMENDED MINIMUM TIME ALLOT-MENT

The chart below describes the recommended minimum time allotment for elementary science:

Grades 1 and 2: 75 minutes per week Grades 3 to 6: 100 minutes per week

Note: The core component of the elementary science program should be covered within the minimum time allotment. Schools not offering religious instruction or instruction in a language other than English may increase the minimum time for science, or any other subject(s) for an additional 300 minutes per week.

#### 3. PROGRAM ELEMENTS

The elementary science program is comprised of four main elements: process skills, psychomotor skills, attitudes, and science concepts.

#### a) Process Skills

The teaching of science as inquiry is the basic instructional strategy recommended in the Alberta elementary science program of studies. Learning to inquire and to think critically are fundamental to science education and to other disciplines in which organized instruction takes place. The formal learning process should begin with experiences that promote development of these skills in their simplest form and in a context and environment appropriate to the age and ability level of the learner. As the student progresses, new and challenging opportunities should be planned and provided which develop increased proficiency in critical thinking.

Inquiry, as the word suggests, is a process of logical and ordered questionning. Questions may arise from a student's own curiosity and from events and situations that are encountered formally and informally. Discrepant or unexplained events arising from personal experiences, or those presented by the teacher in an instructional setting, should stimulate the student to recall previously learned knowledge and former experiences and to seek resolutions to the questions or problems raised. The process may result in a satisfactory answer or understanding in the immediate sense, or may lead to the formulation of a plan to gather additional information, and to test ideas (hypotheses and predictions) in the search for solutions and new understandings.

Inherent in the process of inquiry is the development of those skills and strategies that lead to abilities in gathering and applying information toward answering questions and solving problems.

#### b) Psychomotor Skills

Psychomotor skills include those skills which involve a coordination between the intellect and muscular movement. In the science program, psychomotor skills are involved in handling and manipulating a variety of materials such as water, sand, rocks, soil, magnets, magnifiers, electrical equipment and living things. In some cases, the skills involve very specific movements requiring careful hand and eye coordination (e.g., measuring activities using balances, metre sticks, graduated cylinders and thermometers). In other cases, the movements are more large muscle based and simply learned (e.g., feeling objects for texture, pouring liquids and judging the mass of an object by its heft).

#### c) Attitudes

Attitudes often determine what we do in given situations. Whether we try something or give up, whether we consider something worth caring about or unimportant — all of these are based on attitudes. The development of strong positive attitudes towards self and subject matter is one of the main goals of all school programs, and elementary school science.

#### d) Science Concepts (Subject Matter)

The elementary science program of studies focuses upon three major concept areas:

- i) Matter and Energy
- ii) Living Things and Environment
- iii) Earth, Space, Time

For each division, topics of study (subject matter) have been identified for each of the concept areas. The student will have an opportunity to develop an understanding of the nature of the world through the study of concepts in life science, physical science and earth-space sciences.

The topics of study are intended to serve as a general survey of the concept areas identified. The intent is to provide students with an introductory understanding of certain aspects of the concept area without delving into great detail or emphasis on abstract ideas. The developmental level of the student must be a prime consideration when presenting concepts that are of an abstract nature. Wherever appropriate the subject matter should be introduced through an activity based experience.

Many of the concepts introduced in the elementary science program are further developed, extended, or maintained in the junior high science program. It is at the junior high grades or higher, in particular, where concepts can be dealt with in a more abstract or complex manner.

#### e) Division Specific Objectives

The program of studies defines the skills, content and attitudes to be developed and acquired at the end of each

division. Hence, the curriculum is division specific and not grade specific. This has been done to allow for greater choice in the selection of prescribed resources.

#### f) Relative Emphasis of Program Elements

The following chart suggests the relative emphasis to be accorded to each of the program elements for Division One and Two Science.

Program Elements	Division One	Division Two
Process Skills	55%	50%
Psychomotor Skills	10%	10%
Attitudes	15%	10%
Subject Matter (Concepts)	20%	30%

Content specifications for the elementary science program are available from the Curriculum Branch, on request.

#### 4. PROGRAM CONTENT

#### DIVISION ONE CORE CURRICULUM

"The major emphasis of the elementary science program is on the development of the process skills within the framework of an inquiry approach to teaching science."

PROCESS SKILLS: observing, measuring, classifying, communicating, \*inferring, \*predicting.

#### TOPIC OVERVIEW FOR DIVISION ONE

#### A. Matter and Energy

Properties of Objects Properties of Matter Energy

#### B. Living Things and Environment

Living Things Plants and Animals Environment

#### C. Earth, Space, Time

Order and Time

**Note:** For each topic of study both the subject matter and skills to be taught have been listed. An attempt has been made to include appropriate attitude statements. As well, elective topics related to each area are suggested as possible extensions of the core topics. The suggestions provided in the **Comments** and **Possible Elective** sections are **not** prescriptive in nature.

\* to be introduced toward the latter part of Division One.

#### MATTER AND ENERGY - DIVISION I

#### PROPERTIES OF OBJECTS

#### Subject Matter

Objects can be identified, grouped and ordered on the basis of physical properties such as color, hardness, size, shape, texture, mass, volume, smell and sound.

#### Skills

Students will:

- OBSERVE the properties of objects using their five senses.
- COMPARE, ORDER and CLASSIFY objects according to one or more properties.
- DESCRIBE and RECORD their observations of properties of objects.

#### **Attitudes**

Students will develop an awareness of the importance of the five senses in helping people to find out about the world around them.

#### Comments

Teachers may find the time devoted to this unit in some resources to be excessive.

#### CAUTION:

Children should be made aware of the dangers of tasting unknown substances.

#### Possible Related Elective Topics

Crystals

Collections of leaves, rocks, shells, etc.

Soil studies

Hand lens study

Attribute blocks

#### PROPERTIES OF MATTER

#### Subject Matter

Matter occupies space, has mass and can be classified into three distinct forms. Solids, liquids and gases each have distinctive properties. Solids tend to retain their shape. Liquids take the shape of their container, can be poured and form drops. Gases occupy space, exert pressure and some are odorless as well as colorless. Matter can undergo changes when properties such as size, shape and state change.

#### Skills

Students will:

- CLASSIFY given materials as solids, liquids or gases.
- OBSERVE properties and behavior of solids and CLASSIFY them according to:
  - a) metallic non-metallic
  - b) float sink
  - c) soluble insoluble
  - d) magnetic non-magnetic
- OBSERVE samples of liquids and CLASSIFY them according to the degree of properties such as:
  - a) color
  - b) transparency to light
  - c) viscosity
- OBSERVE and DESCRIBE matter undergoing changes such as freezing, melting, evaporating, heating, cooling.
- OBSERVE that gases occupy space and exert pressure.
- MEASURE and COMPARE masses and volumes of samples of matter.
- DEMONSTRATE various methods of organizing and displaying information gathered.

#### Attitudes

Students will understand the importance of gathering information through various tests to determine characteristics of a substance.

#### Comments

Kitchen and household items are a relevant source of materials for this unit.

Children can construct simple balances using readily available classroom materials.

Activities using eye droppers, balances, hand lens, develop necessary psychomotor skills.

#### **Possible Related Elective Topics**

Magnets

Crystals

Rocks

Candles

Balances

#### **ENERGY**

#### **Subject Matter**

Heat, light, sound and electricity are commonly recognized forms of energy. The sun is identified as the primary source of the earth's energy (both heat and light) as all plants and animals use its energy. Humans are capable of regulating their use of energy.

#### Skills

Students will:

- NAME, DESCRIBE and CLASSIFY some sources and forms of energy (heat, light, sound, electricity).
- MEASURE changes in heat energy using a thermometer.
- DESCRIBE, COMPARE and DEMONSTRATE behaviors that conserve energy in their environment.
- IDENTIFY the sun as the primary source of the earth's energy.
- DESCRIBE and DEMONSTRATE ways we use energy in our daily lives.

#### **Attitudes**

Students will develop an awareness of the importance of the sun as an energy source for living things.

Develop an awareness that they can exhibit behaviors that demonstrate responsible use of energy.

#### Comments

Behaviors that demonstrate responsible use of energy should be stressed.

Alberta Energy materials or locally developed units are excellent resources for this topic.

#### **Possible Related Elective Topics**

Seasonal changes

The Glut Kit: Grade 3 - Alberta Energy

Light Shadows

# LIVING THINGS AND ENVIRONMENT - DIVISION I

#### LIVING THINGS

#### Subject Matter

All those things which require food and water, grow and reproduce are classified as living. Objects not having all of these properties are classed as non-living.

#### Skills

Students will:

- CLASSIFY objects as living and non-living.
- OBSERVE, DESCRIBE and CLASSIFY living things according to their unique characteristics and behaviors.

#### **Attitudes**

Appreciate the importance of collecting and organizing data.

Appreciate the uniqueness of living things and the value of life.

#### Comments

The Flora and Fauna of Alberta Heritage Learning Resources Kit provides the teacher with a variety of photographic material that can be used for topics in the Living Things and Environment section.

#### **Possible Related Elective Topics**

Molds

Crystals

#### PLANTS AND ANIMALS

#### Subject Matter

Plants and animals are living organisms. Each has its specific characteristics and particular needs to sustain life. As living things, all plants and animals grow, require food, water and air, respond to their environment and reproduce their own kind. Plants differ from animals in specific ways relative to the food they eat, how they obtain it, react to stimuli, and move. Plants and animals live in the habitat for which they are best suited.

#### Skills

Students will:

- CLASSIFY living things as plants or animals.
- DESCRIBE and CLASSIFY plants and animals in various ways, e.g., locomotion, habitat, groups with common characteristics.
- OBSERVE, MEASURE, DESCRIBE and RECORD stages in growth of plants.
- OBSERVE and DESCRIBE characteristics of seeds, e.g., size, shape, dispersal.
- DESCRIBE proper care of plants and animals such as pets.

#### Attitudes

Students will develop a sensitivity and respect for living things.

Develop a positive attitude about the importance of providing necessary care for living things.

#### **Comments**

Students should have the opportunity of planting seeds and caring for plants themselves.

Children at this age welcome the responsibility of caring for classroom animals and plants.

Construction of classroom terraria and/or aquaria can promote investigation of different habitats and stimulate class interest.

CAUTION: Teachers need to be aware of student allergies to plants and animals before introducing these into the classroom.

#### **Possible Related Elective Topics**

Alberta Flora and Fauna units

Pets

Classroom animals

In-depth study of a particular species (e.g., Alberta's provincial bird)

Terraria/aquaria

Trees

Life cycles (e.g., brine shrimp, mealworms)

#### **ENVIRONMENT**

#### **Subject Matter**

Our environment includes all of our surroundings, both man-made and natural. It plays an important role in our lives. Humans can change the environment in many ways.

#### Skills

Students will:

- OBSERVE, IDENTIFY and DESCRIBE those changes in the environment that have resulted from man's activities.
- INFER the consequences or outcomes of changes, both man-made and natural, which occur in the environment.
- IDENTIFY various parts of an environment and begin to infer their interdependence.

#### Attitudes

Students will develop an awareness and sensitivity toward the environment and begin to recognize inter-dependencies.

Appreciate the importance of actively participating in the protection and improvement of the environment.

#### Comments

This topic should be dealt with primarily through outdoor studies and interaction with the environment.

Recommended use of outside resource people (e.g., Fish and Wildlife, Alberta Environment).

#### **Possible Related Elective Topics**

Different environments (e.g., desert, prairie, forest, alpine)

Animal studies

Soil studies

Winter studies

Environmental studies (e.g., pond water, streams, pollution)

# EARTH, SPACE, TIME - DIVISION I

#### ORDER AND TIME

#### Subject Matter

Events may be regular or irregular in frequency and order. Some events occur in sequences that have varying time durations. Some changes, such as freezing and melting, are reversible, and others, such as rusting and rotting, are not reversible.

#### Skills

Students will:

- OBSERVE, DESCRIBE, MEASURE and RECORD changes that occur in their environment.
- OBSERVE, DESCRIBE and MEASURE changes that occur over varying periods of time.
- OBSERVE, DESCRIBE and ORDER changes that occur in a regular pattern.
- INFER that observed changes may be classified as reversible.

#### **Attitudes**

Appreciate the importance of collecting, organizing and recording data.

Recognize the continuity and inevitability of change.

#### **Comments**

Examples of changes that the students could investigate are day/night, seasons, weather, plant and animal growth, freezing/melting, rusting/rotting, crystal and mold growth, and erosion.

## Possible Related Elective Topics

Crystals

Dinosaurs

Fossils

Seasons

Molds

Stream study

#### DIVISION TWO CORE CURRICULUM

"The major emphasis of the elementary science program is on the development of the process skills within the framework of an inquiry approach to teaching science."

PROCESS SKILLS: observing, measuring, classifying, communicating, inferring, predicting, controlling variables, interpreting data, defining operationally\*, formulating models\*, hypothesizing\*, experimenting\*.

#### TOPIC OVERVIEW FOR DIVISION TWO

#### A. Matter and Energy

Changes in Matter

Sound

Light

Electricity

Energy Resources and Conservation

#### B. Living Things and Environment

**Environmental Factors** 

Adaptations

Environment and Ecosystems

#### C. Earth, Space, Time

Weather

Water and Land

**Note:** For each topic of study both the subject matter and skills to be taught have been listed. An attempt has been made to include appropriate attitude statements. As well, elective topics related to each area are suggested as possible extensions of the core topics. The suggestions provided in the **Comments** and **Possible Elective** sections are **not** prescriptive in nature.

\* to be introduced with lighter emphasis.

### MATTER AND ENERGY - DIVISION II

#### **CHANGES IN MATTER**

#### **Subject Matter**

Matter can be changed in shape, size, state, and composition. Energy is involved in every change in matter, and in such changes some energy is lost to our use. Adding energy may result in changes of physical properties as well as changes of state such as melting and evaporating. Removing energy leads to condensing and freezing as well as size changes. Changes of shape, size and state are usually easily reversed. Changes of composition such as rusting or burning usually involve relatively larger amounts of energy and are not easily reversed.

#### Skills

Students will:

- OBSERVE, DESCRIBE and INFER changes in the state, shape, size and composition of matter.
- INFER that change has taken place by using such indicators as litmus or BTB.
- OBSERVE that heating matter results in expansion, and cooling results in contraction.
- OBSERVE processes such as rusting and burning and INFER that such processes result in changes in composition because they are not easily reversed.
- OBSERVE processes such as evaporating/condensing, freezing/melting and INFER that such processes result in changes in state, shape or size because they are easily reversible.

#### Attitudes

Recognize that change continues to take place in their environment.

#### Comments

Students will have difficulty recognizing that energy is conserved in most changes, or that it is involved in such processes as rusting. It is not easily measurable or observed in many cases. Note that expansion of water when it freezes is a rare exception to the common occurrence of matter contracting when cooled.

CAUTION: Safety considerations are important when dealing with very cold or very hot materials.

#### Possible Related Elective Topics

Crystals

#### **SOUND**

#### Subject Matter

Sound is a form of energy produced by vibrating objects. Sound travels only through matter and in all directions from the source. Sound may be transmitted, reflected, or absorbed. Materials differ in their ability to transmit sound. The loudness of a sound decreases with the distance from the source. Sounds that are unpleasant because of loudness and other characteristics are termed noise.

#### Skills

Students will:

- OBSERVE, DESCRIBE and DEMONSTRATE conditions necessary to produce sound.
- IDENTIFY and CONTROL variables that cause changes in sound.
- OBSERVE and INFER that solids transmit sound better than liquids and gases.
- OBSERVE that sound becomes less audible as the distance from the source increases.
- DEMONSTRATE that materials vary in their ability to transmit, reflect or absorb sound.
- INFER some of the possible effects that sound of various kinds has on people and the environment.

#### **Attitudes**

Develop positive attitude concerning the impact of excessive sound on our health and well-being.

#### Comments

The last item in Subject Matter will allow students an opportunity to explore pleasant aspects of sound (e.g., music) as well as identify and discuss sources of noise, and the impact noise has on people and the environment.

#### **Possible Related Elective Topics**

Noise pollution Making simple musical instruments Acoustics

#### LIGHT

#### Subject Matter

Light is a form of energy that tends to travel in straight lines and can be reflected, refracted and absorbed. Materials differ in their ability to influence light. The intensity of light decreases with the distance from the source. White light is a combination of all the colors of the spectrum. Prisms, lenses, and mirrors influence the behavior of light.

#### **Skills**

Students will:

- DEMONSTRATE that a beam of light can be reflected or refracted, and the degree to which this happens depends on the color, lustre and composition of the material.
- OBSERVE that an object can be seen when it reflects light, or is a source of light.
- OBSERVE light reflecting off a mirror and INFER that light usually travels in a straight line.
- PREDICT possible paths of light under various conditions.
- OBSERVE that light becomes less intense as the distance between the observation and the source increases.
- OBSERVE and DESCRIBE the effect that lenses, mirrors and prisms have on light.

#### **Attitudes**

Students will develop an appreciation of instances where light and optics are useful in everyday life.

Value the importance of the eye, understand the problems accompanying blindness and obey eye safety principles and practices.

#### **Comments**

It is advisable to use a clear aquarium or vertical filament bulb in your light box for light refraction investigations.

Activities using lenses, prisms, mirrors (mirror cards) help students develop psychomotor skills.

CAUTION: Instruct the children not to observe direct sunlight.

#### **Possible Related Elective Topics**

Pinhole photography Optical illusions Study of the spectrum

#### **ELECTRICITY**

#### **Subject Matter**

Electricity is a form of energy that can be transmitted through a variety of materials. Simple electric circuits can be constructed using a bulb, wire and a cell. In a simple circuit, components of the system can be manipulated to demonstrate their effect on the circuit. Circuits can be open (incomplete) or closed (complete). Certain materials are better conductors of electrical energy than others.

#### Skills

Students will:

- CONSTRUCT simple electric circuits using a bulb, wire and a cell.
- CONSTRUCT and DEFINE OPERATIONALLY open and closed circuits.
- CONTROL VARIABLES in a simple circuit to show their effect on the circuit.
- PREDICT the effects on simple circuits when bulbs, wire and cells are connected in different ways.
- INFER the path that electricity travels in hidden circuits.
- TEST the transmission of electricity through a variety of materials, and INFER that some materials conduct electricity better than others.

#### **Attitudes**

Appreciate safe use of electricity. Appreciate the increasing importance and role of electricity in related technologies.

#### Comments

Students should have experience in using batteries, bulbs and wire in exploring different ways to make simple circuits. Such experiences will not only aid learning but also help students develop psychomotor skills.

CAUTION: Electrical sources should be limited to dry cells.

#### **Possible Related Elective Topics**

Magnets and electromagnets Constructing electrical models

#### ENERGY RESOURCES AND CONSERVATION

#### **Subject Matter**

Energy exists in many forms and can be classified as renewable or nonrenewable. Alternative energy resources include: wind, running water, biomass, solar and nuclear. Intensive energy use by man has resulted in changes in the environment. Conservation of energy and development of alternative sources are essential to our future well-being.

#### **Skills**

Students will:

- IDENTIFY and DESCRIBE examples of energy forms and uses.
- CLASSIFY energy resources as renewable or nonrenewable.
- COMPARE alternative energy sources, e.g., solar, wind and nuclear energy.
- GATHER, ORGANIZE and INTERPRET data about energy use and INFER the effects of this use on the environment.
- DEMONSTRATE ways in which energy use can be conserved in the home and the school.

#### **Attitudes**

Develop an awareness that can exhibit behaviors that demonstrate responsible use of energy.

#### Comments

This topic is conducive to integration with social studies. Principles of conservation are readily adapted to daily behaviors in the classroom – such as turning out lights, etc.

#### Possible Related Elective Topics

Models of solar collectors

Hot dog cookers

Windmills

Energy Sleuth Kit: Grade 6 - Alberta Energy

#### LIVING THINGS AND ENVIRONMENT – DIVISION II

#### **ENVIRONMENTAL FACTORS**

#### Subject Matter

Organisms live in habitats that have environmental factors favorable to their survival. These environmental factors include temperature, light and moisture. Organisms respond to changes in the environmental factors within their habitat.

#### Skills

Students will:

- DESIGN and CONSTRUCT systems to determine how organisms respond to changes in their environment.
- CONTROL VARIABLES such as temperature, light and moisture and describe the response of the organisms to these changes.
- INFER the types of natural habitats or organisms on the basis of their response to factors such as temperature, light and moisture.

#### **Attitudes**

Acquire a sensitivity for the nature of systems. Recognize the importance of considering the interdependence of environmental factors.

#### Comments

Students should have experiences in planning and arranging ways to find out how organisms such as mealworms or sowbugs (isopods) respond to variations in environmental factors like temperature, light and moisture.

#### Possible Related Elective Topics

Investigate small animals and their habitats, in the students' immediate environment.

Plan and construct aquaria or terraria to house simple organisms; use previously learned skills to care for small organisms.

#### **ADAPTATIONS**

#### **Subject Matter**

Structural or behavioral adaptations are characteristics of plants and animals, in response to environmental stimuli, which contribute to their continued survival. Adaptations help protect organisms from predators, get food, eat and move.

Migration is a behavioral adaptation, while protective coloration or camouflage is a structural adaptation.

Some organisms develop through stages of a life cycle with each stage exhibiting special adaptive characteristics.

Plant and animal adaptations can form the basis for classifications such as predator - prey, herbivore - omnivore - carnivore.

#### Skills

Students will:

- OBSERVE plant and animal characteristics and behaviors and INFER their adaptive function.
- CLASSIFY adaptations as behavioral or structural.
- TRACE the life cycle of an organism and DESCRIBE the special adaptive characteristics at each stage.
- CLASSIFY animals as predator or prey on the basis of their special adaptations.

#### **Attitudes**

Develop an appreciation for the beauty and uniqueness of living things.

#### Comments

Students should have the opportunity to make personal observations of life cycles or organisms such as frogs, mealworms and brine shrimp.

Students could design an imaginary plant or animal which has adapted to a certain environment.

#### **ENVIRONMENT AND ECOSYSTEMS**

## **Subject Matter**

The earth environment influences and is influenced by physical factors of weather and radiation, and by life forms, particularly humans. In the total earth environment changes seem to be occurring in the composition of the atmosphere, the quality of the water and the productivity of the land due to man's impact. The well-being of all living things is determined by the combined effects of all environmental factors.

The interaction of all factors involving communities of living things may be studied as an ecosystem where populations share resources of matter and energy in meeting survival needs and maintaining continuity of the community.

#### **Skills**

Students will:

- OBSERVE and DESCRIBE characteristics of a local environment.
- COLLECT and RECORD information regarding the interacting factors within an environment.
- CLASSIFY components of an environment as living or non-living.
- CLASSIFY living components of an environment as producer, consumer or decomposer.
- INFER interactions and interrelationships to describe a food chain within an environment.
- IDENTIFY possible causes of change in a particular system.
- INFER possible effects of changes which may occur in an ecosystem.

#### Attitudes

Awareness of the wholeness of our environment and the importance of each component upon other components and the entire environment.

Sensitivity to the special influence of man and his activities on the environment as a whole.

Sensitivity to the consequence of some of the changes wrought by man upon certain species of plant and animal.

#### Comments

Field trips to explore a variety of environments, the building and maintenance of terraria and aquaria in the classroom, and the study of the characteristics of certain regions through films and slide series, will increase student motivation and enhance the students' comprehension. Reports and projects by students deriving from these studies provide opportunity to apply learning to familiar situations.

#### Possible Related Elective Topics

Studies of populations, e.g., dandelions Impact studies of local environments Endangered species Animal/habitat conservation

# EARTH, SPACE, TIME - DIVISION II

#### WEATHER

#### **Subject Matter**

Changes in temperature, humidity and pressure in the atmosphere contribute to the pattern of weather we experience. Weather factors can be measured with various instruments such as thermometers, anemometers, barometers, and rain gauges.

#### Skills

Students will:

- GATHER, RECORD and GRAPH weather data and on the basis of previous patterns PREDICT possible future weather conditions.
- CONSTRUCT simple weather instruments and use them to measure and record weather factors.

#### **Attitudes**

Since weather phenomena involve the complex interaction of several factors, students should recognize that forecasts are guesses at best and may well apply to small regions within the forecast area.

#### **Comments**

Students can use records of weather factors in a local designated area to develop a climate profile for that area. Students can compare their observation of weather factors with average values over time (climate) to show both trends and fluctuations.

#### Possible Related Elective Topics

Mini-climate studies

## WATER AND LAND

#### **Subject Matter**

Wind and running water change the land surface through erosion and deposition. The quality of the water is affected by its own erosive action and by human activity.

#### Skills

Students will:

- OBSERVE and DESCRIBE changes in physical features of the earth and INFER that the earth's surface is in continuous change.
- OBSERVE changes in the surface of the land caused by wind and running water and INFER that these have altered some of our major land forms over time.
- OBSERVE and INFER the stages (phases) of the water cycle.
- OBSERVE, DESCRIBE and INFER that the quality of water (and water systems) is influenced by natural phenomena and human activity.

# Attitudes

Awareness of the constructive and distinctive changes continually taking place through erosion and deposition and the enhancement of these effects from human activity. Sensitivity to the total consequences of the reduction in quality of water and the loss of soil.

# Comments

This topic is ideally suited to out-of-classroom activities and studies extended over the year. Comparison of a series of photographs of an area which has been eroded will allow students to extend effectively the observation time of these slow processes.

#### SUGGESTED ELECTIVE TOPICS

Topic		Suggested Division	Suggested Resources
1.	Trees	Division 1	Budding Twigs - ESS Trees - 5/13 Forest Appreciation - WEDGE
		Division 2	Trees - EYE Budding Twigs - ESS Studies for Woodlands - Ryerson Flora & Fauna Kit Seeing Through Trees - WEDGE
2.	Mapping	Division 1	Mapping - ESS
		Division 2	Mapping Small Places - EYE
3.	Winter Studies	Division 1	Snow and Ice - EYE Miniclimates - EYE
		Division 2	Snow and Ice - EYE Miniclimates - EYE The Snow Book - WEDGE
4.	Crystals	Division 1	Library references
		Division 2	Library references
5.	Rocks and Minerals	Division 1	Rocks and Charts - ESS
		Division 2	Rocks and Charts - ESS
6.	Soil Studies	Division 1	There's Dirt in the Forest - WEDGE
		Division 2	Studying Soil - Ryerson Running Water - EYE Grounds for Erosion - WEDGE
	Indepth Life Studies, e.g., fish, reptiles, insects, birds, mammals, dinosaurs, plants	Division 1 & Division 2	Flora & Fauna Kit Question Mark Trail Trees - 5/13 Eggs and Tadpoles - ESS Small Creatures Dandelion - EYE Studying Mammals - Ryerson Studying Insects - Ryerson Studying Birds - Ryerson Studying Plants - Ryerson Mealworms - EYE Brine Shrimp - ESS Birds - EYE Life of Beans and Peas - ESS Microgardening - ESS Minibeasts - 5/13 Series The Jolly Green Classroom - WEDGE

Тор	ic	Suggested Division	Suggested Resources
8.	Dinosaurs	Division 1	Library references
9.	Fossils	Division 2	Library references
10.	Environmental Studies	Division 1 & Division 2	Tracks - ESS Pond Water - ESS Studies for Open Places - Ryerson Studies for Woodlands - Ryerson Studying Streams - Ryerson Flora & Fauna Kit Miniclimates - EYE Ecology of Your Community - EYE Pollution - EYE Minibeasts - 5/13 Stream Tables - ESS Running Water - EYE The Pond Book - WEDGE The Creek Book - WEDGE Science on a Kite String - WEDGE There's Dirt in the Forest - WEDGE Cast Your Class to the Wind - WEDGE
11.	Space Travel Flight	Division 1 & Division 2	Library references
12.	Microscope Studies	Division 2	Small Things - ESS Microgardening - ESS Cells - Text resources
13.	Light and Shadows	Division 1	Light and Shadows - ESS
		Division 2	Optics - ESS
14.	Astronomy	Division 2	Daytime Astronomy - ESS Astronomy - EYE Text resources
15.	Simple Machines	Division 1	
		Division 2	
16.	Magnetism	Division 1	
	Electromagnets	Division 2	
17.	Heat	Division 2	Heating and Cooling - ESS
18.	Populations	Division 1	The Dandelion - EYE
		Division 2	
19.	Projects - collections - Science Fair - constructing models	Division 1	Drops, Streams and Containers - ESS Pendulums - ESS Time - 5/13
	- care of living things - consumer product testing - student interest	Division 2	Batteries and Bulbs II - ESS Science on a Kite String - WEDGE Classroom Cameras - WEDGE Kids and Kites - WEDGE

# D. LEARNING RESOURCES

#### 1. Definitions

- 1.1 In terms of provincial policy, learning resources are those print, nonprint and electronic courseware materials used by teachers or students to facilitate teaching and learning.
- 1.2 Prescribed Learning Resources are those learning resources approved by the Minister as being most appropriate for meeting the majority of goals and objectives for courses, or substantial components of courses, outlined in the provincial Programs of Studies.
- 1.3 **Recommended Learning Resources** are those learning resources approved by Alberta Education

because they complement Prescribed Learning Resources by making an important contribution to the attainment of one or more of the major goals of courses outlined in the provincial Programs of Studies.

1.4 **Supplementary Learning Resources** are those additional learning resources identified by teachers, school boards or Alberta Education to support courses outlined in the provincial Programs of Studies by reinforcing or enriching the learning experience.

# 2. Prescribed Learning Resources

Four resource alternatives are provided:

Resource Alternative One: Science. Berger, et al. Houghton Mifflin Canada Ltd., 1979.

Resource Alternative Two: \( \sqrt{Addison-Wesley Science} \). Rockcastle, et al. Addison-Wesley

ley, 1980.

Les Chemine de la Science. Rockcastle, et al. French edi-

tion. Addison-Wesley, 1978.

Resource Alternative Three: Exploring Science. Blecha, et al. Doubleday Canada

Limited, 1977.

Resource Alternative Four: Multiple Reference.

- (a) Examining Your Environment. Wentworth, et al. Holt, Rinehart and Winston of Canada Ltd., 1976-1977.
  - i) Ecology of Your Community
  - ii) Mini Climates
  - iii) Pollution
  - iv) The Dandelion
  - v) Birds
  - vi) Your Senses
  - vii) Small Creatures
  - viii) Mapping Small Places
- (b) Elementary Science Study (ESS). Education Development Center. McGraw-Hill Ryerson Limited, 1967-1975.
  - i) Growing Seeds
  - ii) Light and Shadows
  - iii) Life of Beans and Peas
  - iv) Clay Boats
  - v) Sink or Float
  - vi) Starting From Seeds
  - vii) Brine Shrimp
  - viii) Gases and Airs
  - ix) Balloons and Gases
  - x) Changes
  - xi) Attribute Games
  - xii) Pond Water

- xiii) Small Things
- xiv) Ice Cubes
- xv) Beliavior of Mealworms
- xvi) Coloured Solutions
- xvii) Optics
- xviii) Mystery Powders
- xix) Whistles and Strings
- xx) Musical Instrument Recipe Book
- xxi) Batteries and Bulbs
- xxii) Heating and Cooling
- xxiii) Kitchen Physics
- (c) Science in Action Series. MacMillan, et al. McGraw-Hill Ryerson Limited, 1973-1976.
  - i) The Outdoors: Studies for Open Places
  - ii) The Outdoors: Studies for Woodlands
  - iii) Studying Birds
  - iv) Studying Soil
  - v) Studying Insects
  - vi) Studying Streams
  - vii) Studving Plants
  - viii) Studying Mammals
- (d) Rand McNally SCIIS. Thier, et al. Gage Publishing Limited, 1978.

Physical/Earth Science Sequence

- Level 1 Material Objects
- Level 2 Interaction and Systems
- Level 3 Subsystems and Variables
- Level 4 Relative Position and Motion
- Level 5 Energy Sources
- Level 6 Scientific Theories
- (e) Science: A Process Approach II. Ginn and Company.
  - i) Grade 1 Modules 1 to 15
  - ii) Grade 2 Modules 16 to 30
  - iii) Grade 3 Modules 31 to 45
- (f) MacDonald 5/13 Science. Richards, et al. GLC Publishers Ltd., 1973-76.
  - i) Early Experiences, Stage 1
  - ii) Change I and 2 and Background
  - iii) Early Explorations Using the Environment
  - iv) Investigations, Part 1 and 2
  - v) Tackling Problems, Part 1 and 2
- (g) Energy Literary Series, Grades 1-6. S.R.A. Publishers, SEEDS Foundation.

# 3. Recommended Learning Resources for the Elective

- (a) Examining Your Environment. Wentworth, et al. Holt, Rinehart and Winston of Canada Ltd., 1976-77.
  - i) Running Water
  - ii) Trees
  - iii) Snow and Ice
  - iv) Astronomy
- (b) Elementary Science Study (ESS). Education Development Center, 1967-1975.
  - i) Structures
  - ii) Batteries and Bulbs II
  - iii) Stream Tables
  - iv) Rocks and Charts
  - v) Drops, Streams and Containers
  - vi) Pendulums
  - vii) Mapping
  - viii) Microgardening
  - ix) Eggs and Tadpoles
  - x) Tracks
  - xi) Daytime Astronomy
  - xii) Budding Twigs
- (c) MacDonald 5/13 Science. Richards, et al. GLC Publishers Ltd., 1973-76.
  - i) Time Stages 1 and 2 (Background)
  - ii) Trees Stages 1 and 2
  - iii) Ourselves Stages 1 and 2
  - iv) Minibeasts Stages 1 and 2
- (d) WEDGE Resources. Western Education Development Group. University of British Columbia, 1973-79.
  - i) There's Dirt in the Forest
  - ii) The Snow Book
  - iii) Seeing Through Trees
  - iv) The Pond Book
  - v) The Creek Book
  - vi) Science on a Kite String
  - vii) The Jolly Green Classroom
  - viii) Grounds for Erosion
  - ix) Classroom Cameras
  - x) Cast Your Class to the Wind
  - xi) Kids and Kites



# D. LEARNING RESOURCES

#### 1. Definitions

- 1.1 In terms of provincial policy, learning resources are those print, nonprint and electronic courseware materials used by teachers or students to facilitate teaching and learning.
- 1.2 Prescribed Learning Resources are those learning resources approved by the Minister as being most appropriate for meeting the majority of goals and objectives for courses, or substantial components of courses, outlined in the provincial Programs of Studies.
- 1.3 Recommended Learning Resources are those learning resources approved by Alberta Education because they complement Prescribed Learning Resources by making an important contribution to the attainment of one or more of the major goals of courses outlined in the provincial Programs of Studies.
- 1.4 Supplementary Learning Resources are those additional learning resources identified by teachers, school boards or Alberta Education to support courses outlined in the provincial Programs of Studies by reinforcing or enriching the learning experience.

#### 2. Prescribed Learning Resources

Three to ten print and/or non-print resources have been prescribed for social studies instruction at each grade level.

The prescribed resources are those resources that Alberta Education has assessed as the best presently available for achieving the objectives of grade level social studies programs. These resources are listed in the documents below and are available for purchase at a 40% discount at the Alberta School Book Branch:

- Alberta School Book Branch Catalogue
- Social Studies Learning Resources for Elementary Schools
- Social Studies Learning Resources for Secondary Schools

Resources, once prescribed, retain this status for a minimum of three years.

Resources that are prescribed for use with the Alberta Social Studies Curriculum are as follows:

Grade & Topic Title Publisher

1A	The Discovery Books Series:  You Are Special  Growing Always Seems to Be Up  Helping Makes Me Happy  The Mad Book  The Sad Book  Do You Ever Get Scared?	Edu-Media
IA	Connections in Social Studies Series:  Can You Tell It's Me?  (6 books in series)	Globe/Modern Curriculum Press
1B	Connections in Social Studies Series:  Can You Tell We Are a Family?  (6 books in series)	Globe/Modern Curriculum Press
1B	The Discovery Books Series:  What Mothers Do  What Fathers Do	Edu-Media
1B	My Family and Me (Kit)	Encyclopedia Britannica Corporation
IC	The Discovery Books Series:  Sun Neen, the Best Time of the Year  Hanukkah, the Festival of the Lights	Edu-Media
2A	The Discovery Books Series:  On the Safe Side  My Police Friends  My Health Friends	Edu-Media
2A	Basic Concepts in Social Studies (Kit) (Alberta Version)	Learning Corporation of America

2A/B  2B  Th  2C  2C  3A  4B  5A  G  SA  5B  CC  5C  6A  Po  6A  M  M  M  M  M  M  M  M  M  M  M  M  M	Title	Publisher		
2A/B	Connections in Social Studies Series:  Can You Tell Where I Live?  (4 books in series)	Globe/Modern Curriculum Press'		
2A/B	World of Me Activity Print I Activity Print II	McGraw-Hill Ryerson		
2В	The Discovery Books Series:  A Workday in the City  A Farmer is a Friend	Edu-Media		
2C	Camel Herders of the North African Desert	G.L.C. Publishers Ltd.		
2C	Worldview (Kit) (Alberta Edition)	Scholastic Book Services		
3A	Cities Are for People	Oxford University Press		
4B	Albertans: Past, Present, Future	Weigl Educational Publishers Limited		
5A	Growth of a Nation Series:  Life of the Loyalists  The Fur Trade  Life in Acadia  Northwest Mounted Police  Growth of a Nation Study Prints	Fitzhenry and Whiteside		
5A	Settling the West (Kit)	Canadian Social Sciences Services		
5A	Canada: Growth of a Nation	Fitzhenry and Whiteside		
5B	Canada (Kit)	National Geographic Society		
5B	Canada: This Land of Ours	Ginn and Company		
5C	Canada's Nearest Neighbor: The United States	Ginn and Company		
5C	Neighbours: The United States and Canada	Globe/Modern Curriculum Press		
6A	People of the Past Series:  The Aztecs	G.L.C. Publishers Ltd.		
6A	Modern Knowledge Library Series:  Ancient Greece The Incas	Warwick Press		
6A	Exploring Civilizations, A Discovery Approach	Globe/Modern Curriculum Press		
6B	People in Change Series: South Asia	Addison-Wesley Canada Limited		
6B	Living in China	Book Society of Canada Ltd.		
6C	Here's How It Happens, How Governments Work in Canada	Gage Educational Publishing		
6C	Working Together (Old edition)	Alberta Education		
6C	Working for Canadians (New edition to replace Working Together)	Prentice-Hall Media		
6C	The Structure of Government (Kit)	Prentice-Hall Media		

# **HEALTH**

# A. PROGRAM RATIONALE AND PHILOSOPHY

Good health depends on a combination of factors: the environment in which we live and work; the personal traits we have inherited; the care we receive from doctors and hospitals; and the personal behaviours or habits that we perform daily. All of these work together to affect our health.

Every day we are exposed to potential risks to good health. Pollution in the air we breathe is one example. It is a risk that we, as individuals, cannot do much about. Improving the quality of the environment usually requires the effort of concerned citizens working together for a healthier community.

There are, however, risks that we can control: risks stemming from our personal behaviours and habits. Health experts now agree that these personal behaviours and habits make up one of the most important factors in reducing potential risks and enhancing one's overall health.

The school has an important role to play in helping students to acquire knowledge and develop skills and attitudes which will enable them to live healthy lives. The *Goals of Basic Education*, approved by the Legislature of the Province of Alberta in 1978 for Alberta schools, have clear implications for the health curriculum. Two of the "goals of schooling" in particular provide the basis for the present health curriculum.

- To acquire knowledge and develop skills, attitudes and habits which contribute to physical, mental and social well-being.
- To acquire knowledge and develop skills, attitudes and habits required to respond to the opportunities and expectations of the world of work.

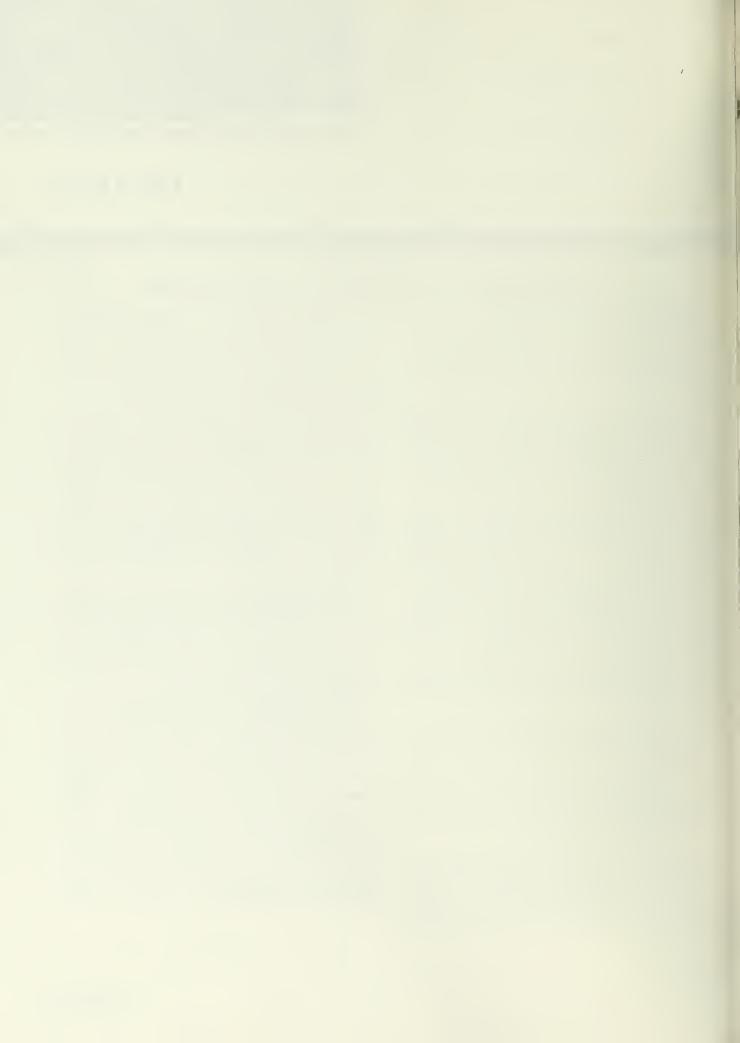
The elementary health curriculum identifies specific teaching objectives which will help to achieve these goals.

A good health curriculum will help students to understand and to cope with the major health problems of our times. In our society, these include such potentially crippling or fatal conditions as heart disease, respiratory disorders, cancer and accidental injuries. They also include problems related to stress management, diet and fitness, as well as disorders having to do with our ability to relate to others and to find meaning in our lives. An adequate health program will address all of these health concerns.

A knowledge of the human body and how it works forms an important part of the health curriculum. However, students must know more than that. To deal effectively with today's health problems, they must develop good interpersonal skills. They must understand the many factors which influence the decisions they make, such as peer pressure, advertising, and family and community values. Moreover, they must be aware of the decision-making process, and learn good decision-making skills. In this regard, they must be aware of the importance of values which guide the decisions they make.

Because values play such an important role in decision-making they form an important part of the health curriculum. For younger children, values are presented in this curriculum as directives for behaviour. For older students, there are learning objectives which examine the nature of decision-making and the role of values, to help students to understand the place of values in their own lives.

The particular values which find expression in the elementary health curriculum also form the basis for the ''desirable personal characteristics'' identified on page (vi) of this document. Virtually all of these characteristics appear in one or more of the learning objectives in the health curriculum. Two of them, however, occur over and over again: ''Respectful – has respect for the opinions and rights of others, and for property'' and ''Responsible – accepts responsibility for own actions. Discharges duties in a satisfactory manner''. These are attributes which characterize a caring individual who can behave in a responsible manner in many situations, including those which affect his/her health. They are attributes which ''contribute to physical, mental and social well-being.''



# B. GOALS AND OBJECTIVES

Health education fosters the growth of knowledge, attitudes, skills and lifelong behaviours that will enable the individual to assume responsibility for healthy living and personal well-being. To help each student to learn how to achieve and maintain an appropriate level of health, the elementary health curriculum is organized around five themes. Each theme has a number of general objectives:

# Theme 1: Self-Awareness and Acceptance

- to consider and appreciate the worth of self and others
- to appreciate the range of human emotions and the importance of expressing emotions positively
- to understand the origins and characteristics of positive and negative personality traits
- to recognize the influence of personal actions and decisions upon relationships with others.

#### Theme 2: Relating to Others

- to appreciate the qualities of others and how healthy relationships are made and maintained
- to consider the importance of healthy relationships with others in the school setting.

#### Theme 3: Life Careers

- to recognize the interests and abilities of self and others
- to understand the importance of work in our society, the occupations associated with work, and the formal and informal pursuits which prepare an individual for work.

#### Theme 4: Body Knowledge and Care

- to understand the structure, function and development of the body
- to appreciate the importance of nutrition to health and to apply the principles of good nutrition to daily living
- to appreciate how factors such as rest, fitness and personal cleanliness contribute to healthful growth
- to understand how sickness and disease can be prevented and how drugs can be used appropriately and inappropriately
- to understand the safety practices required in various situations and to be aware of simple first aid responses to sickness and accidents
- to appreciate the threats and aids to personal health which exist in the community.

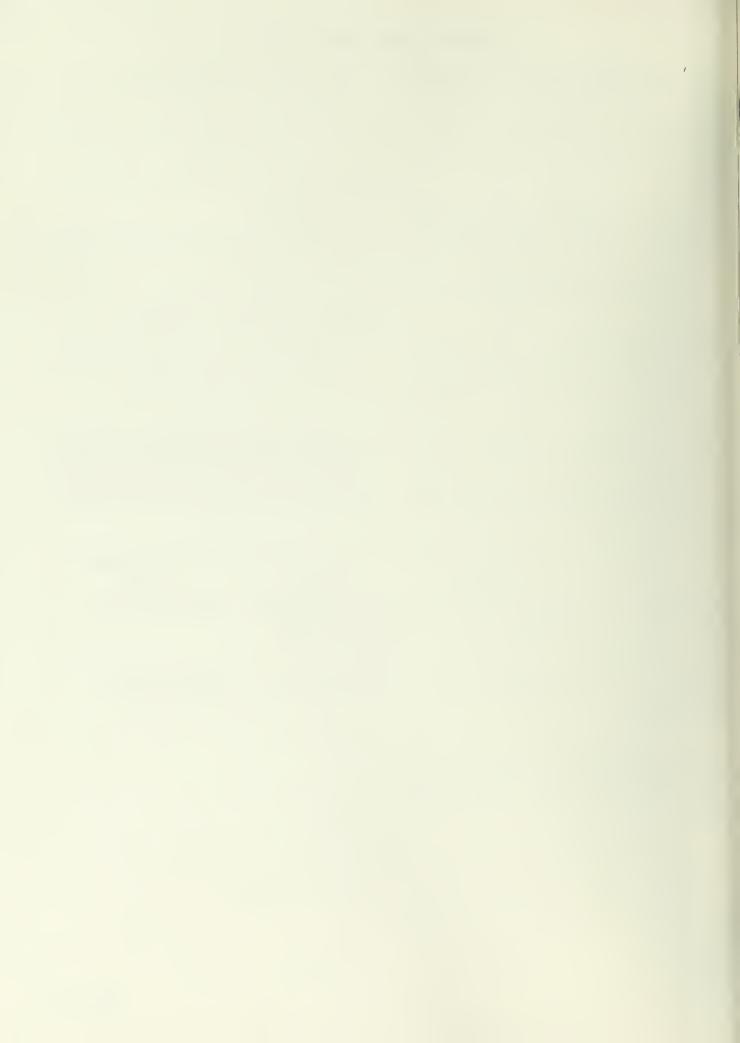
# Theme 5: Human Sexuality (OPTIONAL)

- to understand the structure and function of the reproductive system
- to understand puberty and the changes associated with it
- to understand how a human life is created.

As these themes are developed in the classroom, the goal of health education can be accomplished if all three domains of learning are addressed. Each specific learning objective will have cognitive, affective and psychomotor behaviours associated with it. This is illustrated in the following examples:

	COGNITIVE (Knowledge)	are desirable for both functional and social reasons.  Appreciates the need for Relates positively and		
PHYSICAL DIMENSION	Identifies the structure of a tooth and explains its function.	are desirable for both functional and social	Brushes teeth properly.	
SOCIAL/ PERSONAL DIMENSION	Lists the characteristics of friendship.	Appreciates the need for friends.	Relates positively and effectively to others.	

The areas of study for each of the five themes are outlined in the scope and sequence for the elementary health curriculum. Specific learning objectives, related content and learning resources are included in the body of the curriculum guide.



# C. CONTENT

# SCOPE AND SEQUENCE FOR THE HEALTH EDUCATION CURRICULUM GRADES ONE TO SIX

THEMES	GRADE I	GRADE II	GRADE III	GRADE IV	GRADE V	GRADE VI
THEME I		S	ELF-AWARENESS	AND ACCEPTANC	E	
A. Finding Yourself 1. Self-worth	- Uniqueness (Elective)	- Importance of Home and School (Elective)	- Building Strengths - Coping with Dif- ficult Situations	- Respect for Self - Self-Concept - Ongoing Changes	- "Put-ups" and "Put-downs" on Self and Others - Improving Our- selves	- Formulating Goals - Basic Values
B. Feelings 1. Expressing Oneself	- Types of Emotions - Reality and Fantasy (Elective)	- Ways to Express Oneself - Others Affect Us		- Types of Emotions - Expression of Emotions Varies - Responsibility for Emotional Expression	<ul> <li>Need to Express Feelings</li> <li>Expressing Feelings</li> </ul>	
Dealing with Feelings     Positively			- The Positive Approach - Showing Positive Feelings			
C. Personality  1. Influences and Characteristics				- Good and Bad Traits	- Influences of Human Relation- ships - Influences of Social and Physi- cal Environments (Elective)	- Inherited and Acquired Traits (Elective)
D. Responsibility To The World  1. Developing Relationships	- Family Activities - Benefits of Sharing - Respect for the Privacy of Others	- Honesty and Trust - Consideration for Others	Making Decisions     Accepting Failure and Discouragement	- Our Actions Affect Others - Showing Respect for Others		- Game Playing (Elective)
2. Personal Accountability				- Responsibility for Actions	- Consequences of Our Actions - Building Authen- tic Relationships	- Management of Resources - Personal and Social Con- science
3. Problem-Solving						- Decision-Making Skills
тнеме п			RELATING	TO OTHERS		
A. Peers 1. Consideration for Others	- Similarities and Differences in People - Respect for Others - Good Traits	- Personal Behaviours	- Helping Others - Developing Friendships - Others Affect Our Self-Image			
2. Friendships		- For Happiness		- Friendship - Need for Friends - Courtesy in - Friendships - Siblings as - Friends - Making Friends	- Developing Skills for Rela- tionships - Disagreements	- Friendships with Both Sexes
Personal Interests and Abilities		- Strengths				
Importance of Self and Others		- Individual Importance				

THEMES	GRADE I	GRADE II	GRADE III	GRADE IV	GRADE V	GRADE VI
THEME II - Cont'd.			RELATING	TO OTHERS		
B. School  1. Working with Others	- Concern for Classmates	- Strengths - Concentrating on Strengths	- Building Friend- ships	- Worth of Others - Effect of Class Behaviour - Responsibility for One's Own Behaviour - Behavioural Change - Pride in School - School Accomplishments	- Supporting School Peers	
2. Grown-Ups			- Assist with Prob- lems		- Changing Expectations	
THEME III			LIFE C.	AREERS		
A. Self-Understanding 1. Personal Interests and Abilities	- Interests of Self and Others - Different People Have Different Abilities	- Strengths - Importance as an Individual and Group Member	- People Differ from Each Other - Positive Atti- tudes		- Activities and Interests	- Personal Awareness
2. Relating to Others				- Respect for Others - Sharing Time and Talents		
B. Life Careers  1. The World of Work	- Types of Occupations	- The Role of the Home, School and Community - Provision of Goods and Serv- ices	- Concept of Work	- Dependence on Others - Striving for Inde- pendence	- Cooperation Among Workers - Quality of Work	- Occupations - Knowledge of Occupations - Changing Occupations - Why People Work - Non-Traditional Roles
Occupations and Leisure Pursuits		- School Contributions	- School Preparation for Employment - Communication Skills	- Lifelong Process		
3. Community, Home and School Trends				- Community, Home and School Trends	- Contributing Factors to Life Style - Life Styles in the Community	
C. Career Awareness, Planning and Preparation 1. Study Habits			- School Habits			- School Habits and the World of Work
Preparing for the Next Grade	- Preparation for the Next Grade	- Preparation for the Next Grade	- Orientation for Division II	- Preparation for the Next Grade	- Preparation for the Next Grade	- Orientation for Division III

THEMES	GRADE I	GRADE II	GRADE III	GRADE IV	GRADE V	GRADE VI
THEME IV			BODY KNOWLE	DGE AND CARE		
A. Body Development  1. Body Growth		- Body Cells - Growth Stages - Growth Rates Vary	- Heridity – Children Differ - Children Differ In Growth - Nutrition and Exercise (Elective)	- Functions of Body Cells	- Variations of Growth - Growth at Puberty	- Stages of Development
2. Body Senses	- The "Five" Senses	- Protecting the Eyes and Ears		- Sense of Balance - The Ears and Eyes		
3. Parts of the Body (Body Systems)	- Skin - Two Sets of Teeth - Daily Mouth Care	- Body Care and Maintenance - Structure and Functions of Teeth - Losing Teeth - Teeth, Food Products and Plaque	- Daily Dental Care	- Major Body Organs - Digestive Sys- tems - Urinary System - Lifetime Dental Care - Specialized Den- tal Care	- The Cardio-res- piratory System - Dental Decay - Prevention of Halitosis	- The Skeletal System - The Muscular System - The Nervous System - The Endocrine System
Nutrition     I. Identification of Nutritious Foods	Identification of Nutritious Foods     Classification of Foods     Appreciation of Nutritious Foods	Nutritious Foods     Classification of Foods     Appreciation of Nutritious Foods     Daily Requirements	- Nutritious and Non-nutritious Foods - Cultural Dishes - Daily Food Requirements - Daily Menus	- Nutritious Foods - Classification of Foods - Functions of Foods	- Ingredients in Foods	- Nutrients in Foods - Factors Influenc- ing Food Choices - Selecting a Bal- anced Diet
Identification of Food     Requirements				- Actual Daily Requirements		- Nutrient Content
3. Identification of Quantities			- Daily Menus	- Planning a Bal- anced Breakfast - Choosing Foods	- Using Canada's Food Guide - Why We Eat Balanced Meals - Energy Out, Energy In	
C. Growing Up Healthy (Fitness, Rest, Weight, Strength, Posture and Appearance) 1. Fitness	- Need for Exercise	- Physical Activity for Fun and Fit- ness	- Fun Fitness Activities	- Personal Fitness Attitude	- Cardiovascular Fitness - Evaluating Fitness ness	- Physical, Social, Emotional and Mental Benefits of Fitness
2. Rest		- Rest is Essential to Health - Effects on Energy and Behaviour				
Weight, Strength and Posture	- Good Posture			- Elements of Good Posture - Importance of Good Posture		- Gaining and Los ing Weight
4. Appearance	- Cleanliness and Personal Well- Being	- Bathing and Showering	- How Others View Us	- Skin, Hair, Nails - Hair Washing - Nail Care - Effects of Nutrition on Appearance		
D. Diseases and Drugs  1. Prevention and Control	- Health Habits	- Aids to Getting Well	- Personal Health Practices - The Body Fights Germs	- Communicable and Non-Com- municable Dis- eases - Causes of Dis- eases	- Body Detenses - Basic Health Practices	- Ensuring Cleanli ness
Prescription and Non- Prescription Drugs	- Medicine Chest - Hazardous Symbols		- When to Use Medicines and Drugs - Refusing Sub- stance from Strangers	- Drugs. Effects and Use - Types of Drugs		- Taking Drugs Under Supervi- sion

THEMES	GRADE 1	GRADE II	GRADE III	GRADE IV	GRADE V	GRADE VI
THEME IV - Cont'd.			BODY KNOWLE	DGE AND CARE		
Harmful Effects of Drugs			- Health Hazards of Smoking	- Why People Use Drugs - Caffeine. Effects and Use	- History of Tobacco (Elective) - Effects of Tobacco - Smoking and Sports - Reasons for Smoking	- Reasons for Taking Drugs - Alternatives to Drugs - Alcohol. Effects and Use - Effects of Smoking
E. Safety and First Aid 1. Safety Practices  (It is recommended that this sub-theme be taught at the beginning of the school year.)	Pedestrian     Public Transportation     Public Play     Areas     Home and     School Safety     Bicycle Safety	- Personal and Family Safety Practices	- Safety in Action - Community Agencies	- Pedestrian Safety - Safety Procedures at Home and School - Courtesy - Recreation Safety - Bicycle Safety	Preventing Accidents (Elective)	- Home Safety Assessment
2. First Aid	- Basic First Aid Practices	- First Aid	- Treating Burns	- Basic First Aid and Life Saving	- First Aid Proce- dures	- Emergency Care
F. Protecting People's Health 1. Health and Support Services (Elective)	- Community Safety Personnel		- Role of Dental Helpers - Seeing the Den- tist	- Primary Support Systems	- Secondary Sup- port System	- Reducing Stress - Available Assist ance for Alcoho Problems
<ul><li>2. Consumer Health</li><li>Advertising</li><li>Purchasing</li></ul>					- Effects of Adver- tising	- Purchasing Health Products
Pollution     Immediate Environment     Community Activities		- Classroom Appearance		- Responsibility to Protect and Save - Clean Play- grounds	- Importance of Clean Air and Water - Conservation (Elective)	- Environmental Protection Agen cies
4. Community Activities		- Recreation Facilities	- Becomes Aware of Community Facilities			- Expanded Awareness of Community Facilities
5. Social Costs						- How Living Habits Relate to Physical and Mental Health
THEME V	<del></del>	-	HUMAN SEXUAI	LITY (OPTIONAL)		
A. Puberty f. Puberty				- Growth and Sex- ual Maturity	- Puberty in Females - Puberty in Males - What is Normal	- Sexuality - A Part of One's Total Being - Sexual Matura- tion, Nocturnal Emissions - Other Physical and Emotional Changes In Puberty - The Menstrual Cycle - Vocabulary - Describing Puberty
B. Reproduction 1. A New Life				- Fertilization and Birth	- Reproductive System - Maturity for Reproduction	- Vocabulary - Describing Reproduction

# GRADE I

# **THEME 1: Self-Awareness and Acceptance**

Sub-Themes: A. Finding Yourself; B. Feelings; C. Personality; D. Responsibility to the World

# **Instructional Objectives**

# A. Finding Yourself

- 1. Self-Worth:
  - (a) Understands and accepts one's own importance as a person. (Elective)

## **B.** Feelings

- 1. Expressing Oneself:
  - (a) Learns that all people have many kinds of feelings.
  - (b) Becomes aware of the differences between reality and fantasy. (Elective)

## D. Responsibility to the World

- 1. Developing Relationships:
  - (a) Recognizes one's membership in a family and the need to work and play together.
  - (b) Learns the mutual benefits of sharing and interdependence.
  - (c) Recognizes the need of others for privacy and independence.

# THEME II: Relating to Others

Sub-Themes: A. Peers; B. School

# **Instructional Objectives**

# A. Peers

- 1. Consideration of Others:
  - (a) Understands that there are similarities and differences in all people.
  - (b) Recognizes that the rights and property of others need to be respected.
  - (c) Recognizes the good traits in others.

# B. School

- 1. Working With Others:
  - (a) Develops a special awareness and concern for members of one's class.

#### THEME III: Life Careers

Sub-Themes: A. Self-Understanding; B. Life Careers; C. Career Awareness, Planning and Preparation

# **Instructional Objectives**

# A. Self-Understanding

- 1. Personal Interests and Abilities:
  - (a) Recognizes personal interests and how we resemble or differ from others.
  - (b) Develops an awareness that people have different abilities and that everyone makes a contribution to society.

#### B. Life Careers

- 1. The World of Work:
  - (a) Recognizes that a number of occupations are required to maintain homes, schools and communities.

## C. Career Awareness, Planning and Preparation

- 2. Preparing for the Next Grade:
  - (a) Develops a greater awareness of expectations for Grade 2.

# THEME IV: Body Knowledge and Care

Sub-Themes: A. Body Development; B. Nutrition; C. Growing Up Healthy; D. Diseases and Drugs; E. Safety and First Aid; F. Protecting People's Health

# **Instructional Objectives**

# A. Body Development

- 1. Body Senses:
  - (a) Recognizes that the body has special abilities called senses.
- 3. Parts of the Body:
  - (a) Understands the skin as a protective covering and sensory organ.
  - (b) Understands the functions of teeth, gums, saliva, tongue and lips.
  - (c) Understands that students have two sets of teeth during their life.
  - (d) Recognizes that daily mouth care is important for dental health appearance.
  - (e) Differentiates between less decay-producing foods and more decay-producing foods.

#### **B.** Nutrition

- 1. Identification of Nutritious Foods:
  - (a) Recognizes and identifies nutritious foods.
  - (b) Classifies foods into the four food groups.
  - (c) Develops an appreciation for nutritious foods.

## C. Growing Up Healthy

- 1. Fitness:
  - (a) Understands the need for regular exercise to help the body grow and develop.
- 3. Weight, Strength and Posture:
  - (a) Learns the importance of good posture.
- 4. Appearance:
  - (a) Understands the relationship between cleanliness, physical health and personal wellbeing.

#### D. Diseases and Drugs

- I. Prevention and Control:
  - (a) Learns that diseases can spread from person to person.
- 2. Prescription and Non-Prescription Drugs:
  - (a) Learns the significance of the medicine chest and its contents.
  - (b) Learns the hazardous product symbols.

## E. Safety and First Aid

- 1. Safety Practices:
  - (It is recommended that this sub-theme be taught at the beginning of the school year.)
  - (a) Recognizes pedestrian rules and regulations.
  - (b) Shows courtesy and caution when boarding and riding in vehicles.
  - (c) Becomes aware of recreational safety in the community.
  - (d) Recognizes safety procedures for individual and family needs.
  - (e) Becomes aware of practices for good bicycle safety.
  - (f) Has a basic understanding of first aid.

# F. Protecting People's Health (Elective)

- 1. Health and Support Services:
  - (a) Identifies and describes community personnel and agencies for safety.

# **GRADE 2**

#### THEME I: Self-Awareness and Acceptance

Sub-Themes: A. Finding Yourself; B. Feelings; C. Personality; D. Responsibility to the World

# **Instructional Objectives**

# A. Finding Yourself

- 1. Self-Worth:
  - (a) Understands one's place and importance in the home and at school. (Elective)

# B. Feelings

- 1. Expressing Oneself:
  - (a) Understands that feelings and emotions are expressed in words, actions and facial/body expressions.
  - (b) Learns that we affect and are affected by the actions of others.

# D. Responsibility to the World

- 1. Developing Relationships:
  - (a) Appreciates that others depend on and trust us.
  - (b) Practises consideration for others.

# THEME II: Relating to Others

Sub-Themes: A. Peers; B. School

# **Instructional Objectives**

#### A. Peers

- 1. Consideration for Others:
  - (a) Learns that one's behaviours can hurt other people.
- 2. Friendships:
  - (a) Understands that friends are important to one's happiness.
- 3. Personal Interest and Abilities:
  - (a) Develops an awareness of one's strengths to increase one's confidence.

- 4. Importance of Self and Others:
  - (a) Demonstrates a basic understanding of one's importance as an individual and as a group member.

#### B. School

- I. Working With Others:
  - (a) Recognizes that everyone has strengths.
  - (b) Understands that it is better to concentrate on a person's strengths.

#### THEME III: Life Careers

Sub-Themes: A. Self-Understanding; B. Life Careers; C. Career Awareness, Planning and Preparation

# **Instructional Objectives**

## A. Self-Understanding

- I. Personal Interests and Abilities:
  - (a) Develops an awareness of one's strengths to increase one's self-confidence.
  - (b) Demonstrates a basic understanding of one's importance as an individual and as a member of a group.

#### **B. Life Careers**

- I. The World of Work:
  - (a) Demonstrates familiarity with occupations related to maintaining a home and family, a school, and the community.
  - (b) Observes that occupations exist to provide services and produce goods.
- 2. Occupations and Leisure Pursuits:
  - (a) Recognizes that what is learned in school relates to maintaining a home and family, a school, and the community.

#### C. Career Awareness, Planning and Preparation

- 2. Preparing for the Next Grade:
  - (a) Develops a greater awareness of expectations for Grade 3.

## THEME IV: Body Knowledge and Care

Sub-Themes: A. Body Development; B. Nutrition; C. Growing Up Healthy; D. Diseases and Drugs; E. Safety and First Aid; F. Protecting People's Health

# **Instructional Objectives**

## A. Body Development

- I. Body Growth:
  - (a) Learns that the cell is the basic structural unit of life.
  - (b) Learns that there are human growth stages but each person grows in a unique way or pattern.
  - (c) Recognizes that people grow physically at different rates.
  - (d) Learns the basic protection of the senses (especially sight and hearing).
- 3. Parts of the Body:
  - (a) Develops helpful practices for the care and maintenance of all body systems.
  - (b) Understands the structure and functions of teeth.
  - (c) Understands the effects of the loss of primary teeth and damage caused by the loss of permanent teeth.
  - (d) Recognizes that foods affect teeth.

# **B.** Nutrition

- 1. Identification of Nutritious Food:
  - (a) Recognizes and identifies nutritious foods.
  - (b) Classifies foods into the four food groups.
  - (c) Develops an appreciation for nutritious foods.
- 3. Identification of Quantities:
  - (a) Identifies quantities of foods needed.

## C. Growing Up Healthy

- 2. Rest
  - (a) Learns that rest and relaxation is essential for a healthy body and mind.
  - (b) Identifies the differences in energy and behaviour when fully rested, compared to too little rest.
  - (c) Learns that physical activity promotes fitness and enjoyment.

4. Appearance:

(a) Bathes regularly for physical, emotional and social well-being.

## D. Diseases and Drugs

1. Prevention and Control:

(a) Understands what to do when not feeling well.

#### E. Safety and First Aid

1. Safety Practices:

(It is recommended that this sub-theme be taught at the beginning of the school year.)

(a) Identifies and describes personal and family safety practices.

#### 2. First Aid:

(a) Understands some basics of first aid.

# F. Protecting People's Health

3. Pollution:

Immediate Environment

- (a) Develops basic understanding of personal responsibility for appearance of classroom.
- (b) Practises classroom cleanliness recognizing its effect on one's physical and social well-being.

4. Community Activities:

(a) Becomes aware of community recreational facilities.

# **GRADE 3**

#### THEME I: Self-Awareness and Acceptance

Sub-Themes: A. Finding Yourself; B. Feelings; C. Personality; D. Responsibility to the World

# **Instructional Objectives**

#### A. Finding Yourself

- 1. Self-Worth:
  - (a) Learns ways to develop strengths.
  - (b) Learns to cope with difficult situations.

#### B. Feelings

- 2. Dealing With Feelings Positively:
  - (a) Develops ability to deal with feelings in positive ways.
  - (b) Develops ways to show positive feelings.

## D. Responsibility to the World

- 1. Developing Relationships:
  - (a) Learns that growing up involves making decisions and accepting the consequences.
  - (b) Learns to accept that growing up involves some failures and discouragements.

# **THEME II: Relating to Others**

Sub-Themes: A. Peers; B. School

# **Instructional Objectives**

#### A. Peers

- 1. Consideration for Others:
  - (a) Discovers that helping others is rewarding.
- 2. Friendships:
  - (a) Develops friendships with other boys and girls.
- 4. Importance of Self and Others:
  - (a) Discovers ways other people affect our self-image.

#### B. School

- 1. Working With Others:
  - (a) Recognizes school as a place to be with old friends, and as a place to make new friends.
- 2. Grown-Ups:
  - (a) Learns that grown-ups can help with personal relationships.

#### THEME III: Life Careers

Sub-Themes: A. Self-Understanding; B. Life Careers; C. Career Awareness, Planning and Preparation

# **Instructional Objectives**

#### A. Self-Understanding

- 1. Personal Interests and Abilities:
  - (a) Observes that people differ from one another in certain physical, intellectual and social characteristics.
  - (b) Demonstrates positive attitudes towards oneself and others.

#### B. Life Careers

- 1. The World of Work:
  - (a) Develops an understanding of the concept of 'work' and identifies work roles at home and at school.
- 2. Occupations and Leisure Pursuits:
  - (a) Recognizes that mastery of the basic skills will some day enhance their general employability.
  - (b) Recognizes the need for effective communication skills.

# C. Career Awareness, Planning and Preparation

- 1. Study Habits:
  - (a) Recognizes that habits developed in school have employment implications.
- 2. Preparing for the Next Grade:
  - (a) Develops a greater awareness of expectations for Division II.

## THEME IV: Body Knowledge and Care

Sub-Themes: A. Body Development; B. Nutrition; C. Growing Up Healthy; D. Diseases and Drugs; E. Safety and First Aid; F. Protecting People's Health

# **Instructional Objectives**

# A. Body Development

- 1. Body Growth:
  - (a) Understands that growth patterns are affected by heredity.
  - (b) Recognizes that children grow at different rates.
  - (c) Becomes aware that nutrition and physical exercise affect body weight and strength. (Elective)
- 3. Parts of the Body:
  - (a) Recognizes that teeth are made to last a lifetime and that daily dental care is necessary to maintain healthy teeth and gums.

#### B. Nutrition

- 1. Identification of Nutritious Foods:
  - (a) Identifies nutritious foods.
  - (b) Develops an appreciation for foods from a variety of cultures.
- 2. Identification of Food Requirements:
  - (a) Identifies food requirements.
- 3. Identification of Quantities:
  - (a) Plans a daily menu.

# C. Growing Up Healthy

- 1. Fitness:
  - (a) Experiences and appreciates exercise as fun and practises it in the classroom, gymnasium and playground.
- 4. Appearance:
  - (a) Understands that cleanliness is a factor in how others feel about us.

#### D. Diseases and Drugs

- 1. Prevention and Control:
  - (a) Learns that good health habits help us keep well.
  - (b) Learns that our bodies fight disease.
- 2. Prescription and Non-Prescription Drugs:
  - (a) Learns that it is important to take drugs/medicines when needed and only under responsible supervision.
  - (b) Learns to refuse to accept substances from strangers.
- 3. Harmful Effects of Drugs:
  - (a) Becomes aware of the harmful effects of smoking.

## E. Safety and First Aid

- 1. Safety Practices:
  - (It is recommended that this sub-theme be taught at the beginning of the school year.)
  - (a) Identifies changes in the environment that affect safety.
  - (b) Identifies and describes individual safety practices.
  - (c) Identifies and describes individuals with special knowledge and skills influencing community safety.
- 2. First Aid:
  - (a) Demonstrates how one treats burns.

# F. Protecting People's Health

- 1. Health and Support Services (Elective):
  - (a) Understands the roles of the community dental helpers.
  - (b) Understands the importance of regular dental visits.
- 4. Community Activities:
  - (a) Becomes aware of community recreation facilities.

# **GRADE 4**

#### **THEME 1: Self-Awareness and Acceptance**

Sub-Themes: A. Finding Yourself; B. Feelings; C. Personality; D. Responsibility to the World

# **Instructional Objectives**

# A. Finding Yourself

- 1. Self-Worth:
  - (a) Learns that respect for oneself is essential.
  - (b) Understands that self-concept is determined by external and internal forces.
  - (c) Recognizes that self and others change in many ways.

## B. Feelings

- 1. Expressing Oneself:
  - (a) Recognizes that all feelings and emotions are normal and can be good.
  - (b) Recognizes that feelings and emotions are shared by all but may be expressed differently.
  - (c) Understands that a sense of responsibility for emotional expression must be developed.

# C. Personality

- 1. Influences and Characteristics:
  - (a) Learns the good and bad characteristics of personality.

# D. Responsibility to the World

- 1. Developing Relationships:
  - (a) Recognizes the effects of one's actions on others.
  - (b) Respects the feelings, rights, and property of others.
- 2. Personal Accountability:
  - (a) Accepts responsibility for one's own actions.

# THEME II: Relating to Others

Sub-Themes: A. Peers; B. School

# **Instructional Objectives**

#### A. Peers

- 2. Friendships:
  - (a) Understands what a good friend is.
  - (b) Learns why everyone needs friends.
  - (c) Learns the role of courtesy in friendships.
  - (d) Recognizes that sisters and brothers can be friends.
  - (e) Learns how to make and keep friends.

#### B. School

- 1. Working With Others:
  - (a) Appreciates the needs of a new student.
  - (b) Recognizes the effect of behaviour on a class.
  - (c) Accepts responsibility for one's own behaviour.
  - (d) Learns that behaviour can be changed.
  - (e) Affirms the school as a good place to be.
  - (f) Takes pride in school and its accomplishments.

#### THEME III: Life Careers

Sub-Themes: A. Self-Understanding; B. Life Careers; C. Career Awareness, Planning and Preparation

# **Instructional Objectives**

### A. Self-Understanding

- 1. Personal Interests and Abilities:
  - (a) Recognizes the importance of sharing time and talents with others.
- 2. Relating to Others:
  - (a) Appreciates and respects individual differences and the dignity and worth of every individual.

#### **B.** Life Careers

- 1. The World of Work:
  - (a) Recognizes that people must depend on other individuals, businesses, and communities for their basic needs.
  - (b) Demonstrates a desire to work for personal satisfaction and independence.
- 2. Occupations and Leisure Pursuits:
  - (a) Understands that career development is a lifelong process.
- 3. Community, Home and School Trends:
  - (a) Develops interests and aptitudes by becoming involved in various school, home and community activities.

# C. Career Awareness, Planning and Preparation

- 2. Preparing for the Next Grade:
  - (a) Develops a greater awareness of expectations for Grade 5.

# THEME IV: Body Knowledge and Care

Sub-Themes: A. Body Development; B. Nutrition; C. Growing Up Healthy; D. Diseases and Drugs; E. Safety and First Aid; F. Protecting People's Health

# **Instructional Objectives**

## A. Body Development

- 1. Body Growth:
  - (a) Understands the cell as the building block for all living things, and recognizes the types and functions of cells.
- 2. Body Senses:
  - (a) Recognizes that several body organs contribute to the sense of balance.
  - (b) Learns the purpose and basic structure of the two main senses the eyes and the ears.
- 3. Parts of the Body (Body Systems):
  - (a) Recognizes that body organs are essential to life and body function.
  - (b) Understands the purposes, locations and structure of the digestive and urinary systems.
  - (c) Recognizes that teeth should last a lifetime.
  - (d) Understands that certain dental problems require specialized help.

#### **B.** Nutrition

- 1. Identification of Nutritious Foods:
  - (a) Identifies nutritious foods.
  - (b) Classifies foods into the four food groups.
  - (c) Identifies functions of a variety of foods.
- 2. Identification of Food Requirements:
  - (a) Identifies food requirements.
- 3. Identification of Quantities:
  - (a) Plans a balanced breakfast and nutritious snacks.
  - (b) Selects nutritious foods.

## C. Growing Up Healthy

- 1. Fitness:
  - (a) Learns that the relationship among nutrition, rest, exercise, adequate sleep and physical activity promotes a healthy lifestyle.

- 3. Weight, Strength and Posture:
  - (a) Learns good posture techniques.
  - (b) Learns the importance of good posture and its physical and social effects.
  - (c) Becomes aware of some of the postural disorders and how these can be avoided.

#### 4. Appearance:

- (a) Understands the structure and function of the skin, hair and nails.
- (b) Knows how, and how often to wash hair.
- (c) Practises proper techniques for cutting fingernails and toenails.
- (d) Understands the effect of nutrition on skin, hair and nails.

#### D. Diseases and Drugs

- 1. Prevention and Control:
  - (a) Understands that diseases can be communicable and noncommunicable.
  - (b) Understands what causes diseases.
- 2. Prescription and Non-Prescription Drugs:
  - (a) Is able to differentiate between prescription and non-prescription drugs.
  - (b) Lists types of prescription and non-prescription drugs.
- 3. Harmful Effects of Drugs:
  - (a) Understands the reasons people use drugs for non-medical purposes.
  - (b) Recognizes that commonly used beverages and foods contain caffeine and understands the effects of caffeine.

#### E. Safety and First Aid

- 1. Safety Practices:
  - (It is recommended that this sub-theme be taught at the beginning of the school year.)
  - (a) Recognizes pedestrian rules and regulations.
  - (b) Recognizes safety procedures at home and in the school.
  - (c) Shows courtesy and caution when boarding and riding in vehicles.
  - (d) Is aware of recreation safety in the community.
  - (e) Is aware of good bicycle safety practices.

#### 2. First Aid:

(a) Will demonstrate basic first aid and life saving techniques.

## F. Protecting People's Health

- 1. Health and Support Services (Elective):
  - (a) Understands the reasons people need support systems.
  - (b) Identifies some of the primary support systems available.
  - (c) Identifies ways to use primary support systems.

#### 3. Pollution:

- (a) Recognizes that one must interact and relate with the total environment for one's own protection. (Elective)
- (b) Accepts responsibility for saving energy and reducing waste.
- (c) Accepts responsibility in disposing of wastes in appropriate receptacles.
- (d) Understands why playgrounds should be kept clean and develops attitudes for keeping school grounds clean.

#### **OPTIONAL**

#### THEME V: Human Sexuality

Sub-Themes: A. Puberty; B. Reproduction

# **Instructional Objectives**

#### A. Puberty

- 1. Puberty:
  - (a) Understands the meaning of puberty.
  - (b) Becomes familiar with the changes that take place from childhood to adulthood.
  - (d) Learns that puberty brings body changes including secondary sex characteristics.
  - (d) Understands that males and females develop at different rates and there are wide variations within each sex.

# B. Reproduction

- 1. A New Life:
  - (a) Understands basic functions of reproduction.

# GRADE 5

# THEME I: Self-Awareness and Acceptance

Sub-Themes: A. Finding Yourself; B. Feelings; C. Personality; D. Responsibility to the World

# **Instructional Objectives**

# A. Finding Yourself

- 1. Self-Worth:
  - (a) Recognizes the effects of "put-ups" and "put-downs" on the self and others.
  - (b) Applies methods to improve strengths and weaknesses.

# **B.** Feelings

- 1. Expressing Oneself:
  - (a) Understands the need for both males and females to be able to express their feelings and emotions.
  - (b) Is aware of feelings and is able to express them.

#### C. Personality

- 1. Influences and Characteristics:
  - (a) Recognizes that personality is developed and influenced by most human relationships.
  - (b) Appreciates that the social and physical environment influences feelings and attitudes. (Elective)

#### D. Responsibility to the World

- 2. Personal Accountability:
  - (a) Learns the positive and negative aspects of the consequences of one's actions.
  - (b) Demonstrates honesty and reliability in a variety of situations.

# THEME II: Relating to Others

# Sub-Themes: A. Peers; B. School

# **Instructional Objectives**

#### A. Peers

- 2. Friendships:
  - (a) Develops skills that promote open authentic relationships with others.
  - (b) Recognizes that friends do not always have to agree with one another but can still remain friends.

#### B. School

- 1. Working With Others:
  - (a) Accepts the differences in abilities of school peers and recognizes classmates as a supportive group.
- 2. Grown-Ups:
  - (a) Becomes aware of the changing expectations of teachers and other adults.

#### THEME III: Life Careers

Sub-Themes: A. Self-Understanding; B. Life Careers; C. Career Awareness, Planning and Preparation

# **Instructional Objectives**

# A. Self-Understanding

- 1. Personal Interests and Abilities:
  - (a) Develops a greater awareness of how one's activities and interests relate to occupations.

#### **B.** Life Careers

- 1. The World of Work:
  - (a) Understands that cooperation among workers is important.
  - (b) Demonstrates concern for the quality of one's work in and out of school, and recognizes that both employer and employee, or teacher and student, have a responsibility to each other.
- 3. Community, Home and School Trends:
  - (a) Recognizes that various factors determine one's way of living.
  - (b) Observes the ways of living of various people in the community and beyond.

## C. Career Awareness, Planning and Preparation

- 2. Preparing for the Next Grade:
  - (a) Develops a greater awareness of expectations for Grade 6.

# THEME IV: Body Knowledge and Care

Sub-Themes: A. Body Development; B. Nutrition; C. Growing Up Healthy; D. Diseases and Drugs; E. Safety and First Aid; F. Protecting People's Health

# **Instructional Objectives**

# A. Body Development

- 1. Body Growth:
  - (a) Understands the rate of growth and development during early adolescence results in wide variations between individuals of the same and opposite sex.
  - (b) Understands that growth at puberty occurs in spurts.
- 3. Parts of the Body (Body Systems):
  - (a) Learns the structure and functions of the cardiorespiratory system.
  - (b) Understands the role of plaque in dental decay and periodontal disease.
  - (c) Learns the main causes and prevention of halitosis.

#### B. Nutrition

- 1. Identification of Nutritious Foods:
  - (a) Identifies nutritious foods.
- 2. Identification of Food Requirements:
  - (a) Identifies food requirements.
- 3. Identification of Quantities:
  - (a) Plans a balanced meal.
  - (b) Chooses food wisely.

# C. Growing Up Healthy

- 1. Fitness:
  - (a) Understands how strength, flexibility, agility and endurance develop through regular exercise to promote cardiovascular fitness.
  - (b) Learns to evaluate one's level of fitness by a pre-test and post-test.

## D. Diseases and Drugs

- 1. Prevention and Control:
  - (a) Recognizes that the body has natural and manmade defences against disease.
  - (b) Protects one's body from diseases by giving attention to proper rest, cleanliness, vaccines and appropriate clothing.
- 3. Harmful Effects of Drugs:
  - (a) Investigates the history of tobacco. (Elective)
  - (b) Describes the immediate and long-term effects of tobacco.
  - (c) Understands the effects of smoking on one's endurance in sports.
  - (d) Recognizes some of the reasons why people begin to smoke. (Elective)

# E. Safety and First Aid

- 1. Safety Practices:
  - (It is recommended that this sub-theme be taught at the beginning of the school year.)
  - (a) Is able to identify good safety practices and attitudes toward common accident situations. (Elective)
- 2. First Aid:
  - (a) Develops knowledge of basic first aid procedures.

## F. Protecting People's Health

- 1. Health and Support Services (Elective):
  - (a) Identifies some of the secondary support systems available in the community.
- 2. Consumer Health Advertising:
  - (a) Recognizes the prevalence of advertisements aimed at children in relation to foods and life style products.
- 3. Pollution:
  - (a) Understands that clean air and water are important to one's health.
  - (b) Recognizes that the conservation of air and water depends upon many concerned people. (Elective)

# **OPTIONAL**

## **THEME V: Human Sexuality**

Sub-Themes: A. Puberty; B. Reproduction

# **Instructional Objectives**

## A. Puberty

- 1. Puberty:
  - (a) Understands that the menstrual cycle is a natural integral part of human reproduction and marks the onset of puberty in females.
  - (b) Understands that puberty in males is marked by the production and release of sperm cells from the body.
  - (b) Accepts one's own stage and level of development as normal.

# **B.** Reproduction

- 1. A New Life:
  - (a) Develops a basic knowledge of how reproduction occurs and life begins.
  - (b) Appreciates the differences between physical and social emotional readiness in reproduction.

# **GRADE 6**

# THEME I: Self-Awareness and Acceptance

Sub-Themes: A. Finding Yourself; B. Feelings; C. Personality; D. Responsibility to the World

# **Instructional Objectives**

# A. Finding Yourself

- 1. Self-Worth:
  - (a) Understands the importance of setting short and long-term goals for oneself.
  - (b) Learns to recognize basic values.

#### C. Personality

- 1. Influences and Characteristics:
  - (a) Learns the basic differences between inherited and acquired characteristics. (Elective)

# D. Responsibility to the World

- 1. Developing Relationships:
  - (a) Learns to recognize and deal with "gameplaying". (Elective)

#### 2. Personal Accountability:

- (a) Accepts responsibility for managing personal and financial resources.
- (b) Learns the meaning of personal and social conscience.

#### 3. Problem-Solving:

(a) Learns problem-solving and decision-making skills.

# THEME II: Relating to Others

Sub-Themes: A. Peers: B. School

# **Instructional Objectives**

#### A. Peers

- 2. Friendships:
  - (a) Develop friendships with both sexes.

#### THEME III: Life Careers

Sub-Themes: A. Self-Understanding; B. Life Careers; C. Career Awareness, Planning Preparation

# **Instructional Objectives**

#### A. Self-Understanding

- 1. Personal Interests and Abilities:
  - (a) Develops a greater awareness of oneself as an individual, and how one relates to others in society.

# **B.** Careers

- 1. The World of Work:
  - (a) Recognizes that occupations can be classified in various ways.
  - (b) Examines a variety of occupations related to one's interests and abilities.
  - (c) Recognizes the reasons why individuals change occupations.
  - (d) Appreciates that work is an activity that gives meaning to one's life.
  - (e) Becomes aware that there is an increasing number of men and women in non-traditional roles.

## C. Career Awareness, Planning and Preparation

- 1. Study Habits:
  - (a) Appreciates that attitudes and habits developed in school will be useful in the world of work.
- 2. Preparing for the Next Grade:
  - (a) Develops a greater awareness of expectations for Division III.

#### THEME IV: Body Knowledge and Care

Sub-Themes: A. Body Development; B. Nutrition; C. Growing Up Healthy; D. Diseases and Drugs; E. Safety and First Aid; F. Protecting People's Health

# **Instructional Objectives**

#### A. Body Development

- 1. Body Growth:
  - (a) Understands the stages of human development.
- 3. Parts of the Body (Body Systems):
  - (a) Learns the structure and functions of the skeletal system.
  - (b) Learns the structure and functions of the muscular system.
  - (c) Learns about some health problems and injury prevention related to the skeletal and muscular systems.
  - (d) Learns the purpose, structure, and function of the nervous system.
  - (e) Learns about some health problems related to the nervous system.
  - (f) Learns the structure and function of the endocrine system.

#### B. Nutrition

- 1. Identification of Nutritious Foods:
  - (a) Identifies nutritious foods.
  - (b) Considers the factors which influence food choices.
  - (c) Chooses from food alternatives.

- 2. Identification of Food Requirements:
  - (a) Analyzes the nutrient content of combination foods.

## C. Growing Up Healthy

- 1. Fitness:
  - (a) Lists several physical, social, emotional and mental benefits of a fit person as opposed to an unfit person.
- 3. Weight, Strength and Posture:
  - (a) Learns the causes of obesity and how to gain or lose weight in a healthful manner.

#### D. Diseases and Drugs

- I. Prevention and Control:
  - (a) Describes several diseases that may occur when poor cleanliness exists.
- 2. Prescription and Non-Prescription Drugs:
  - (a) Learns the importance of taking drugs only as prescribed under responsible supervision.
- 3. Harmful Effects of Drugs:
  - (a) Examines why students start using drugs such as alcohol, nicotine and caffeine.
  - (b) Determines what alternatives are available to drug use.
  - (c) Investigates the use of alcohol and its effects, its potential for abuse, and community problems which occur as a result of alcohol misuse and abuse.
  - (d) Recognizes the effects of life-style choices on the development of diseases and general health.

## E. Safety and First Aid

- I. Safety Practices:
  - (It is recommended that this sub-theme be taught at the beginning of the school year.)
  - (a) Assesses the home for safety hazards and formulates a plan (with parents) for reducing identified hazards.
- 2. First Aid:
  - (a) Develops knowledge of basic emergency procedures.

# F. Protecting People's Health

- 1. Health and Support Services (Elective):
  - (a) Examines methods and resources for reducing stress associated with health-related concerns (family break-up, death, today's living problems).
  - (b) Becomes aware of agencies that assist families with alcohol problems.

# 2. Consumer Health - Purchasing:

(a) Appreciates that the worth and cost of health products should be considered before purchase or use.

#### 3. Pollution:

 (a) Recognizes that many organizations are necessary to maintain or enhance sanitary conditions.

# 4. Community Activities:

(a) Becomes more aware of community recreational facilities, and is encouraged to use them.

#### 5. Social Costs:

(a) Learns the social costs of diseases associated with smoking, alcohol, and drug use and abuse.

#### **OPTIONAL**

#### THEME V: Human Sexuality

Sub-Themes: A. Puberty; B. Reproduction

# **Instructional Objectives**

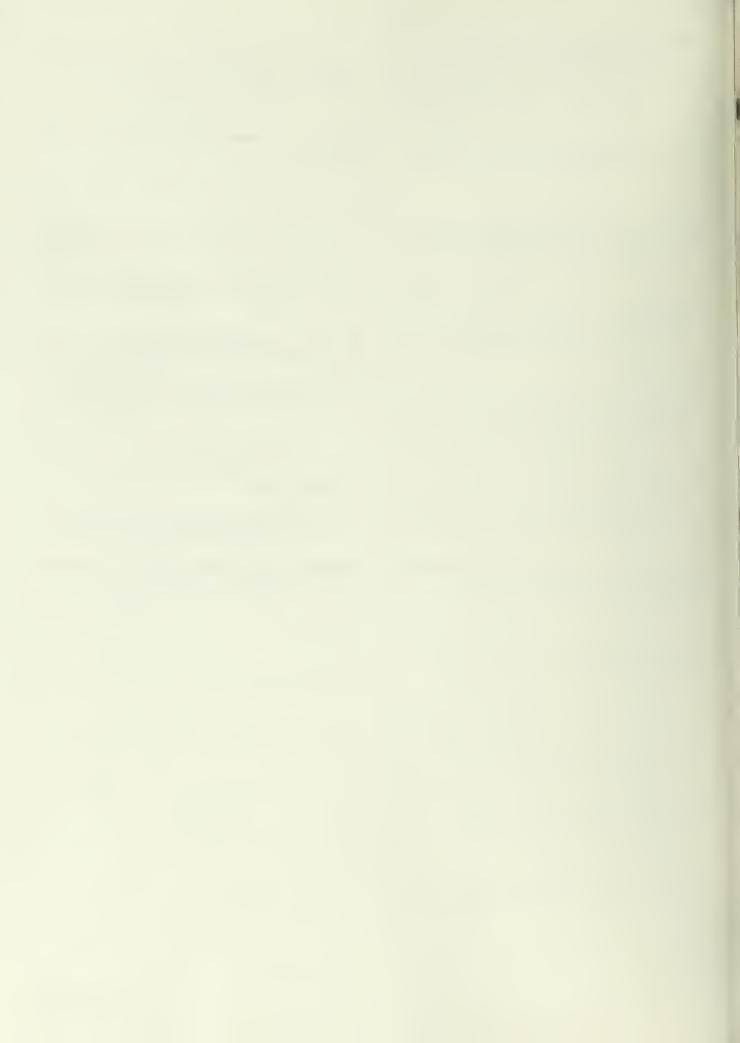
# A. Puberty

# 1. Puberty:

- (a) Accepts that one's sexuality is a part of one's healthy body image.
- (b) Develops an awareness of new responsibilities faced as a result of sexual maturation.
- (c) Understands how sperm cells are produced and released from the body through nocturnal emissions.
- (d) Understands that the menstrual cycle is a natural integral part of human reproduction.
- (e) Understands that there are emotional and physical changes which accompany puberty.
- (f) Develops an acceptable scientific vocabulary useful in describing puberty.

# **B.** Reproduction

- 1. A New Life:
  - (a) Develops an acceptable vocabulary useful in describing reproduction.



# D. LEARNING RESOURCES

#### 1. Definitions

- 1.1 In terms of provincial policy, learning resources are those print, nonprint and electronic courseware materials used by teachers or students to facilitate teaching and learning.
- 1.2 Prescribed Learning Resources are those learning resources approved by the Minister as being most appropriate for meeting the majority of goals and objectives for courses, or substantial components of courses, outlined in the provincial Programs of Studies.
- 1.3 **Recommended Learning Resources** are those learning resources approved by Alberta Education because they complement Prescribed Learning Resources by making an important contribution to the attainment of one or more of the major goals of courses outlined in the provincial Programs of Studies.

1.4 **Supplementary Learning Resources** are those additional learning resources identified by teachers, school boards or Alberta Education to support courses outlined in the provincial Programs of Studies by reinforcing or enriching the learning experience.

#### 2. Prescribed Resources

- The Healthful Living Program. Textbooks for Grades 1-6. David Walker Project Director. Toronto: Doubleday Canada Limited, 1982.
- You and Your Health, Home, School and Community. Textbooks for Grades 1-6. Julius B. Richmond, et al. Glenview, Illinois: Scott, Foresman and Company, 1977.



# PHYSICAL EDUCATION

# A. PROGRAM RATIONALE AND PHILOSOPHY

The rationale for physical education as a subject taught in Alberta schools comes directly from the *Goals of Basic Education for Alberta* as adopted by the Alberta Legislative Assembly in 1978. In part these goals are as follows:

"Schooling, as part of education, accepts primary and distinctive responsibility for specific goals basic to the broader goals of education. Programs and activities shall be planned, taught and evaluated on the basis of these specific goals in order that students:

- Acquire knowledge and develop skills, attitudes and habits which contribute to physical, mental and social well-being.
- Achievement of the broader goals of education must be viewed as a shared responsibility of the community. Maximum learning occurs when the efforts and expectations of various agencies affecting children complement each other. Recognizing the learning that has or has not occurred through various community influences, among which the home is most important, the school will strive to:
  - Develop intellectual curiosity and a desire for lifelong learning.
  - Develop self-discipline, self-understanding, and a positive self-concept through realistic appraisal of one's capabilities and limitations.
  - Develop an interest in cultural and recreational pursuits."

# Aims of Physical Education

The aim of physical education is a physically educated individual who can develop an interest in physical activity as an essential component of an active, healthy lifestyle. Physical education is an integral part of the total schooling program. Through movement-centered experiences, physical education provides a basis on which the individual's development can be maximized in the psychomotor, cognitive and affective domains.

An outgrowth of physical education is quality and meaningful movement which is attained through carefully selected and sequenced experiences in the class instruction physical education program. These experiences allow the individual to respond physically at a level of performance related to the individual's level of development.

Much of the contemporary movement approach in physical education is based on the work done by Rudolph Laban. Although his work was primarily in the area of dance, others have adapted his work so as to apply it to other areas of physical education. Four main concepts can be used to classify movement in physical education.

- 1. Body Awareness "What" the body moves.
  - body parts
  - body shapes
  - transferring weight, e.g., cartwheel
  - supporting weight, e.g., hanging from a bar
  - balancing weight, e.g., head stand.
- 2. Space Awareness "Where" the body moves.
  - directions
  - levels, e.g., high, medium, low
  - patterns, e.g., zig-zag, straight line, curve.
- 3. Effort "How" the body moves.
  - speed, e.g., slow, fast
  - quality, e.g., strong, light
  - flow, e.g., jerky, smooth.
- 4. Relationship "With whom" or "With what" the body moves.
  - alone
  - partner, group or team
  - cooperative or competitive
  - large apparatus, e.g., high bar
  - small apparatus, e.g., balls and bats.



# B. GOALS AND OBJECTIVES

The needs of the three learning domains provide the foundation upon which the following four physical, cognitive, affective and psychomotor education goals are formulated:

- THE PHYSICAL EDUCATION PROGRAM SHOULD ASSIST THE INDIVIDUAL IN DEVELOPING EFFI-CIENT AND EFFECTIVE MOTOR SKILLS AND APPLYING THESE SKILLS IN A WIDE VARIETY OF PHYSICAL ACTIVITIES;
- THE PHYSICAL EDUCATION PROGRAM SHOULD ASSIST THE INDIVIDUAL IN DEVELOPING AND MAINTAINING PHYSICAL FITNESS:
- THE PHYSICAL EDUCATION PROGRAM SHOULD ASSIST THE INDIVIDUAL IN DEVELOPING KNOWLEDGE AND UNDERSTANDING OF FACTORS INVOLVED IN ATTAINING COMPETENCE IN AND APPRECIATION OF PHYSICAL ACTIVITY; and

 THE PHYSICAL EDUCATION PROGRAM SHOULD ASSIST THE INDIVIDUAL IN DEVELOPING AND MAINTAINING POSITIVE PERSONAL ATTRI-BUTES AND INTERPERSONAL RELATIONSHIPS INCLUDING A POSITIVE ATTITUDE TOWARDS CONTINUED PARTICIPATION IN PHYSICAL ACTIVITY.

Each of the seven program dimensions has objectives which identify the knowledge, attitudes, and physical and social skills. Each dimension provides for:

P – Psychomotor development

C – Cognitive development

A – Affective development

### PHYSICAL FITNESS

Acknowledging individual differences, each child will:

	Objectives		G	rade	Lev	el	
		1	2	3	4	5	6
P	Improve physical fitness through vigorous and continuous physical activity in all dimensions of the program.	*	*	*	*	*	*
P	Learn to assess personal fitness levels by utilizing ongoing testing.	*	*	*	*	*	*
C	Understand that physical fitness is essential to life.	*	*	*	*	*	*
C	Understand the effects of exercise on the major components of the circulatory system.	*	*	*	*	*	*
C	Understand the effects of exercise on the major respiratory system.			*	*	*	*
C	Understand the effects of exercise on the major muscles, bones and joints.			*	*	*	*
C	Understand that the ability to become fit differs from one person to another.			*	*	*	*
C	Understand personal capabilities, potential and limitations related to physical fitness.				*	*	*
C	Understand the processes of fitness conditioning.				*	*	*
C	Understand how climatic conditions can affect lungs and limbs.				*	*	*
C	Understand safety principles as they apply to physical fitness activities.	*	*	*	*	*	*
A	Experience success and enjoyment through participation in physical fitness activities.	*	*	*	*	*	*

## **GAMES**

Acknowledging individual differences, each child will:

	Objectives			rade	el		
		1	2	3	4	5	6
Р	Stop, start, change direction and speed.	*	*	*	*	*	*
<u>P</u>	Move into spaces and avoid others.	*	*	*	*	*	*
P	Project, receive and retain games equipment with various body parts and implements.	*	*	*	*	*	*
Р	Feint and guard an opponent.				*	*	*
P	Move into empty spaces to receive a games object.			*	*	*	*
P	Apply games skills (above) in a variety of modified and informal games situations.			*	*	*	*
P	Improve physical fitness through vigorous and continuous participation in games activities.	*	*	*	*	*	*
С	Understand the difference between offence and defence.		*	*	*	*	*
C	Understand basic games rules and apply them in games situations.			*	*	*	*
C	Understand safety principles as they apply to games activities.	*	*	*	*	*	*
С	Understand basic offensive and defensive strategies.				*	*	*
A	Cooperate in partner and in small group situations.	*	*	*	*	*	*
A	Accept winning and losing in a gracious manner.	*	*	*	*	*	*
Α	Experience success and enjoyment through participation in games activities.	*	*	*	*	*	*

## **GYMNASTICS**

Acknowledging individual differences, each child will:

	Objectives	Grade Level					
		1	2	3	4	5	6
P	Perform a wide variety of actions engaging the whole body in locomotion.	*	*	*	*	*	*
P	Demonstrate a wide variety of body shapes while engaging the whole body in locomotion and/or balance (stillness, i.e., weight bearing).	*	*	*	*	*	*
P	Stretch and curl the body when moving or balancing.				*	*	*
P	Twist and turn the body when moving or balancing.				*	*	*
P	Perform a variety of weight bearing actions.	*	*	*	*	*	*
P	Combine body actions in simple movement sequences.	*	*	*	*	*	*
P	Demonstrate gymnastics sequences using different levels, directions, and pathways.		*	*	*	*	*
P	Demonstrate gymnastics sequences with variations in speed.			*	*	*	*
P	Perform gymnastics sequences with a partner.			*	*	*	*
P	Perform gymnastics sequences as a member of a small group.			*	*	*	*
P	Apply gymnastics skills to small and large apparatus.	*	*	*	*	*	*
P	Improve physical fitness through vigorous and continuous participation in gymnastics activities.	*	*	*	*	*	*
C	Understand the body parts and their role in relationship to movement, shape and (whole body) function.		*	*	*	*	*
C	Understand personal and general space.	*	*	*	*	*	*
С	Understand safety principles as they apply to gymnastic activities.	*	*	*	*	*	*
С	Know the proper care and handling of equipment.	*	*	*	*	*	*
A	Cooperate with others.	*	*	*	*	*	*
A	Experience success and enjoyment through participation in gymnastic activities.	*	*	*	*	*	*
A	Appreciate the performance of self and others.	*	*	*	*	*	*

## DANCE

Acknowledging individual differences, each child will:

	Objectives				e Level		
		1	2	3	4	5	6
P	Demonstrate body awareness through movement involving shape, balance, and transfer of weight.	*	*	*	*	*	*
P	Demonstrate space awareness through movement involving direction, level, and personal or general space.	*	*	*	*	*	*
P	Demonstrate qualities of movement involving speed, force, flow.	*	*	*	*	*	*
<u>P</u>	Demonstrate relationship through movement with a partner, small group or object(s).	*	*	*	*	*	*
P	Demonstrate movement sequences in response to a variety of musical, verbal, and visual stimuli.	*	*	*	*	*	*
P	Participate in a variety of rhythmic dance forms – creative, folk and dance.	*	*	*	*	*	*
P	Improve physical fitness through vigorous and continuous participation in dance activities.	*	*	*	*	*	*
С	Understand various effort qualities in movement.		*	*	*	*	*
C	Understand personal space, general space, and the inherent differences between the two.	*	*	*	*	*	*
С	Understand the basic action words.	*	*	*	*	*	
C	Understand relationship changes between parts of one's own body.			*	*	*	*
С	Understand spatial actions and effort actions.					*	*
С	Understand safety principles as they apply to dance activities.	*	*	*	*	*	*
A	Experience feelings of success and enjoyment through participation in dance activities.	*	*	*	*	*	*
A	Appreciate the aesthetics of dance.	*	*	*	*	*	*
A	Experience feelings of success and enjoyment through participation in dance activities.	*	*	* *	* *	:	* *

## **OUTDOOR PURSUITS**

The following activities comprise the outdoor pursuits dimension – Ice Skating, Snow-shoeing, Cross-country Skiing, Downhill Skiing and Orienteering.

Acknowledging individual differences, each child will:

	Objectives				Grade Level							
		1	2	3	4	5	6					
P	Apply and extend basic movement skills (e.g., stop, start, change direction and speed) in outdoor pursuits.	*	*	*	*	*	*					
P	P Improve physical fitness through vigorous and continuous participation in outdoor pursuits.				*	*	*					
C	Understand applications of orienteering pursuits skills.	*	*	*	*	*	*					
C	Understand the use of clothing and footwear appropriate for activities in the winter outdoors.	*	*	*	*	*	*					
C	Understand safety principles as they apply to outdoor pursuits activities.	*	*	*	*	*	*					
A	Cooperate in partner and small group situations.	*	*	*	*	*	*					
A	Exhibit positive attitudes toward participation in physical activity out of doors in all seasons.	*	*	*	*	*	*					
A	Enjoy participation in low organizational games in the outdoors.	*	*	*	*	*	*					
A	Experience success and enjoyment through participation in outdoor pursuits activities.	*	*	*	*	*	*					

Note: \*Indicates the grade level at which the objective receives teaching emphasis.

**Special Note:** Although outdoor pursuits is considered to be an important part of the well-balanced physical education program, decisions as to what activities should occur will depend upon climate, geography, resources and equipment.

Acknowledging individual differences, each child will:

## **Objectives**

# P Demonstrate aquatics skills in the following areas:

- Orientation to water.
- Propulsion through water.
- Safety in, on or near the water.
- P Improve physical fitness through vigorous and continuous participation in aquatics activities.
- C Understand the principles associated with buoyancy, body shape, and propulsion in the water.
- C Understand safety principles as they apply to activities in, on or near water.
- C Understand the unique contribution of swimming to safety in water-related activities.
- A Participate in swimming and related activities in leisure time.
- A Experience success and enjoyment through participation in aquatics activities.

#### **Grade Level**

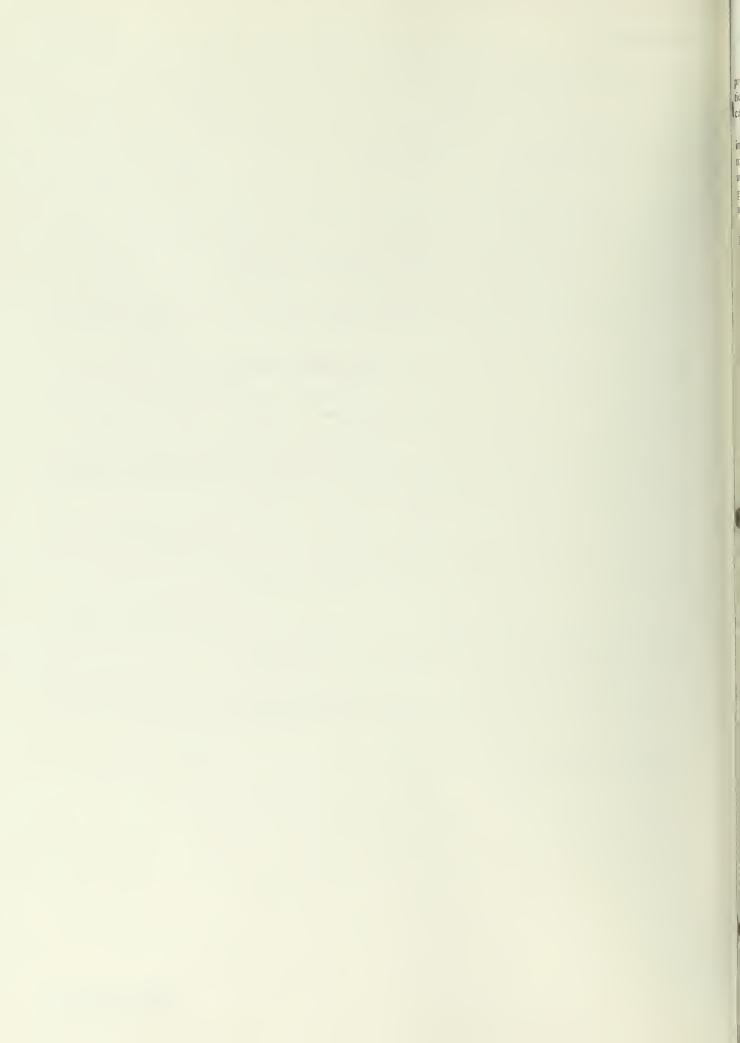
To ensure appropriate sequential development, it is recommended that a program such as the Red Cross Water Safety Program and/or the Y.M.C.A. Learn to Swim Program be used to meet individual student needs.

A minimum of at least one exposure to a swimming and water safety program is the requirement during the elementary years. Decisions as to when that experience should occur will depend upon the time needed, the availability of the facility, qualified personnel, transportation, and financial resources. Aquatics is considered a vital dimension of a well-balanced physical education program (an exposure = 10 to 12 well planned lessons).

## TRACK AND FIELD

Acknowledging individual differences, each child will:

	Objectives	Grade Leve			el		
		1	2	3	4	5	6
P	Throw small objects for distance.	*	*	*	*	*	*
P	Run various distances at differing speeds.	*	*	*	*	*	*
P	Jump for distance and for height.	*	*	*	*	*	*
P	Demonstrate the form and pace associated with running sprints, relays and longer distances.				*	*	*
P	Demonstrate the techniques of starting and finishing running events.				*	*	*
P	Run over obstacles of various heights.		*	*	*	*	*
P	Demonstrate the form associated with the approach, take-off and landing in jumping for height and for distance.					*	*
P	Improve physical fitness through vigorous and continuous participation in track and field activities.	*	*	*	*	*	*
С	Understand the basic techniques applied to running, jumping and throwing events.					*	*
С	Know the basic rules which apply to running, jumping and throwing events at this level.				*	*	*
С	Understand safety principles as they apply to track and field activities.	*	*	*	*	*	*
A	Interact positively with others while involved in running, jumping and throwing activities.	*	*	*	*	*	*
A	Enjoy running, jumping and throwing outdoors.	*	*	*	*	*	*
A	Demonstrate responsibility and cooperation through involvement in various aspects of the track and field program.				*	*	*
A	Experience success and enjoyment through participation in track and field activities.	*	*	*	*	*	*



# C. CONTENT

An integral part of the well-balanced physical education program, each dimension utilizes carefully selected activities to contribute to the development of the physically educated individual.

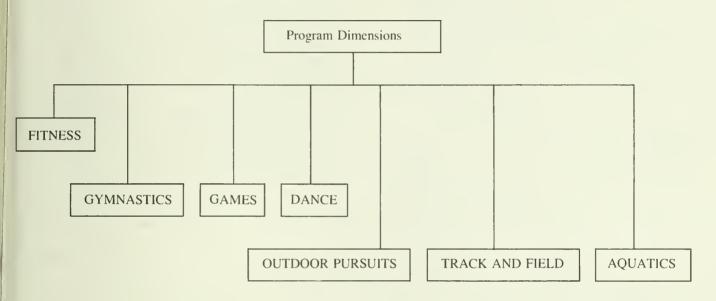
All seven dimensions of physical education are desirable in a well-balanced program. It is recognized that students may be excused from instruction in special circumstances and that local conditions (finance, facilities, equipment, religious persuasion, etc.,) may preclude the offering of some activities in a given dimension.

**Dance** activities, through a variety of dance forms, emphasize the expressive aspect of movement in which the body is used as a means for communicating ideas and feelings.

**Outdoor pursuits** emphasize physical activities requiring wise and careful use of the environment.

**Aquatics** use a unique environment to promote the safe pursuit of water related activities.

## **Physical Education Program Dimensions**



Physical fitness emphasizes optional functioning of the cardio-respiratory and musculo-skeletal systems and makes a significant contribution to the total well-being of the individual. The pursuit of physical fitness is an integral part of the other six program dimensions. In addition, the fitness dimension provides insights into the systems and functions of the body and how they are affected by movement and exercise.

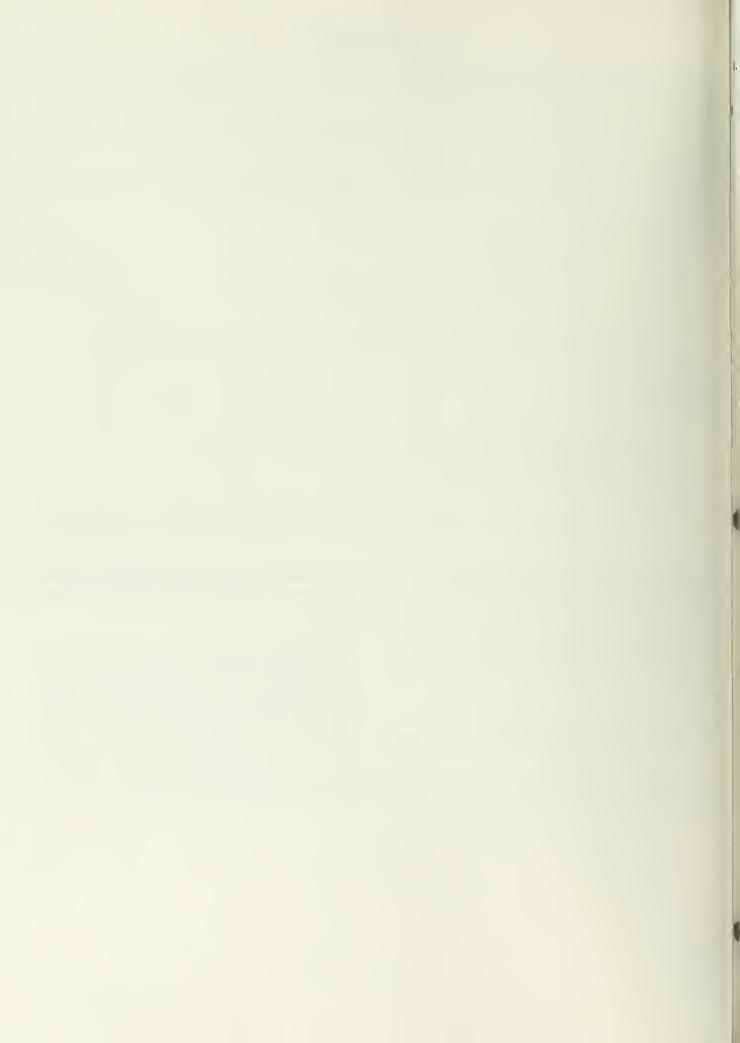
Games activities emphasize sending, receiving and retaining skills, footwork, agility and body coordination, and elements of offense and defence.

**Gymnastic** activities emphasize body management skills which develop strength, flexibility and fluency of movement.

**Track and field** emphasizes walking, running, jumping and throwing activities requiring speed, height, distance and endurance.

#### **Time Allotment**

The minimum recommended time for instruction in the subjects of health and physical education in the elementary grades is 150 minutes per week at each grade level. Health and physical education are viewed as separate and distinct subjects. The minimum recommended time for health in the elementary grades is 60 minutes per week at each grade level. A minimum of 90 minutes per week at each grade level is recommended for physical education instruction. Individual schools should determine in their timetabling how the minimum 90 minutes can be provided.



# D. LEARNING RESOURCES

#### 1. Definitions

- 1.1 In terms of provincial policy, learning resources are those print, nonprint and electronic courseware materials used by teachers or students to facilitate teaching and learning.
- 1.2 Prescribed Learning Resources are those learning resources approved by the Minister as being most appropriate for meeting the majority of goals and objectives for courses, or substantial components of courses, outlined in the provincial Programs of Studies.
- 1.3 Recommended Learning Resources are those learning resources approved by Alberta Education because they complement Prescribed Learning Resources by making an important contribution to the attainment of one or more of the major goals of courses outlined in the provincial Programs of Studies.
- 1.4 Supplementary Learning Resources are those additional learning resources identified by teachers, school boards or Alberta Education to support courses outlined in the provincial Programs of Studies by reinforcing or enriching the learning experience.

## **Prescribed Learning Resources**

#### Grades 1 to 3

Elementary School Dance, Grade One. Red Deer School District #104.

Elementary School Dance, Grade Two. Red Deer School District #104.

Elementary School Dance, Grade Three. Red Deer School District #104.

Elementary School Skating. Doreen Ryan. (Grades 2 and 3.)

The Fitness Dimension. Alberta Education.

Folk Dance in the Elementary School. Calgary Board of Education.

*Gymnastics, A Movement Approach.* Calgary Board of Education, 1981.

*Improvised Playthings*. M. Ellis and A.B. Nielsen, 1980.

K-3 Games. Calgary Board of Education.

Orienteering, Level 1. Calgary Board of Education.

Tabloid Sports Day. Calgary Board of Education.

Track and Field in the Elementary School. Calgary Board of Education.

#### Grades 4 to 6

Basic Skills Series. Calgary Board of Education.

Basketball-Type Games

Fastball-Type Games

Floor Hockey-Type Games

Football-Type Games

Hand, Paddle and Racquet-Type Games

Relay Games

Scoopball Games

Soccer-Type Games

Volleyball-Type Games

Cross Country Skiing. Red Deer Public School District #104.

Elementary School Dance, Grade Four. Red Deer School District #104.

Elementary School Dance, Grade Five. Red Deer School District #104.

Elementary School Dance, Grade Six. Red Deer School District #104.

Elementary School Skating. Doreen Ryan.

The Fitness Dimension. Alberta Education, 1982.

Folk Dance in the Elementary School. Calgary Board of Education.

Gymnastics, A Movement Approach. Calgary Board of Education.

*Improvised Playthings*. M. Ellis and A.B. Nielsen, 1980.

Orienteering, Level 1. Calgary Board of Education.

Snowshoeing. Red Deer Public School District #104.

Tabloid Sports Day. Calgary Board of Education.

Track and Field in the Elementary School. Calgary Board of Education.



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school boards or Alberta Education to support courses outlined in the provincial Programs of Studies by reinforcing or enriching the learning experience.

#### 2. Prescribed Resources

\*Deplantie, Raymond. *J'écoute, je parle*. Levels 1-2. Agincourt, Ontario: Gage Educational Publishing Ltd., 1967.

Massey, D. Anthony: Bick, Catherine, and Scuccato, Denise. *Répondez s'il vous plaît (RSVP)*. Levels 1-3. Toronto: Copp Clark Publishing, 1975-77.

Nemni, Monique and Kerr, Doris. *Bonjour Canada!* Ensembles 1-3; *Explorations 1*. Scarborough, Ontario: Prentice-Hall of Canada, 1979.

\* This resource has been delisted and will be phased out by June 1985.

Grade 4		Prescribed Components	Recommended Components
J'écoute, je parle	Level 1	Pupil's Book	Teacher's Manual
RSVP	Allons-y!	Text and Kit	
Bonjour Canada!	Autour de moi	Text	Student Activity Workbook
	Parlons chiffres	Text and Cassettes	Student Activity Workbook
			Teacher's Manual
Grade 5			
J'écoute, je parle	Level 2	Pupil's Book	Teacher's Manual
RSVP	Ça roule	Text and Kit	
Bonjour Canada!	Parlons chiffres	Text and Cassettes	Student Activity Workbook
			Teacher's Manual
	A vos marques	Text and Cassettes	Student Activity Workbook
			Teacher's Manual
Grade 6			
J'écoute, je parle	Level 2	Pupil's Book	Teacher's Manual
RSVP	A grands pas	Text and Kit	
Explorations 1	Ça tourne	Text and Cassettes	Student Activity Workbook
			Teacher's Manual

All of the above publications are available from the School Book Branch: 10410 - 121 Street, Edmonton, Alberta, T5N 1L2.

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25074 -25073 -25079 -R. BLUE

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25070 -25077 -YELLO TAN

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# For Reference

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